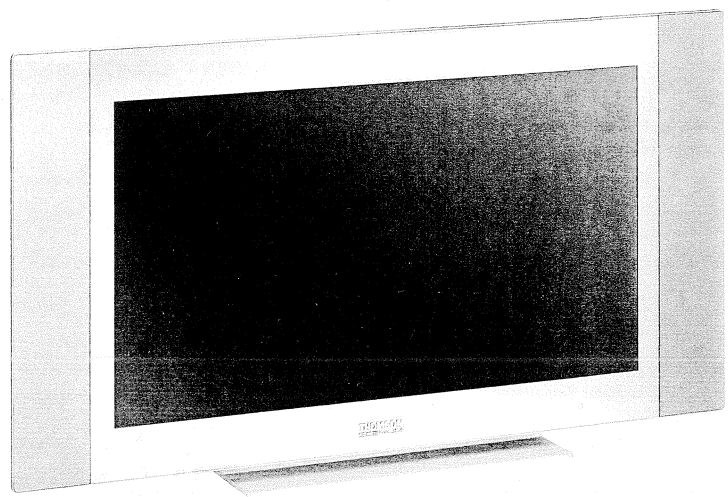
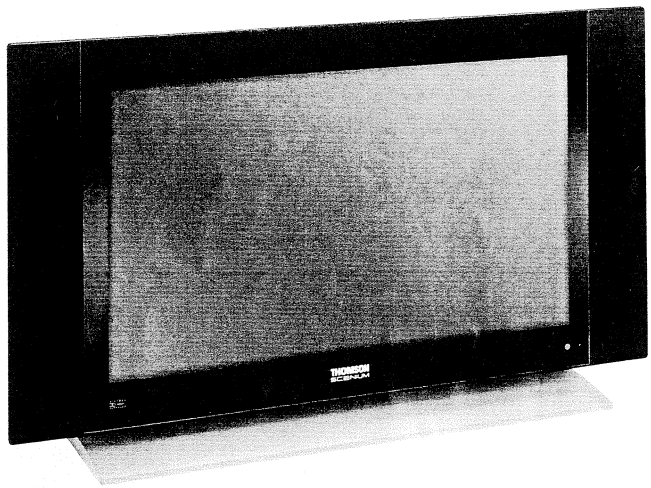
THOMSON

TV

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

LCD03B
27"& 30"





WARNING :	*Before servicing this chassis please read the safety recommendations.*
ATTENTION :	*Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG :	*Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE :	*Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE :	*Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 35792740 - 0504 / 6M -LCD03B 27" & 30" Print.

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Do not disconnect modules when they are energized!
Repairs on power supply section are to be carried out only with isolating transformer.

Ne pas retirer les modules lorsqu' ils sont sous tension. N'effectuer les travaux de maintenance sur la partie reliée au secteur (Switch Mode) qu'au travers d'un transformateur d'isolement.

Module nicht bei eingeschaltetem Gerät entfernen!
Servicearbeiten am Netzteil nur unter Verwendung eines Regeltrenntrafos durchführen.

Non scollegare le piastre quando sono alimentate!
Per le riparazioni sulla sezione alimentatore, utilizzare un trasformatore isolatore.

No desconectar los módulos cuando están activados. Las reparaciones en la sección de alimentación de energía deben ser ejecutadas solamente con un transformador de separación.

⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be garanteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) nicht durch Original - Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione dei componenti di sicurezza (evidenziati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformitá dell'apparecchio. In tal caso è "esclusa la responsabilità " del costruttore.

La sustitución de elementos de seguridad (marcados con el simbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

RECEIVER :
On UHF,input level : 1 mV, bar test pattern :
- PAL, I standard, 100% white.

Via the scart socket, input level : 1 Vpp, bar test pattern :

Colour, contrast and brightness at mid-position, sound at minimum.
Programme selected : PR 01.

DC voltages measured between the point and earth using a digital voltmeter.

RECEPTEUR :
En UHF, niveau d'entrée 1 mV mire de barres
- SECAM, Norm L, Blanc 100%.

Par la prise Péritélévision, niveau d'entrée 1 Vcc, mire de barres .

Couleur, contraste, lumière à mi-course, son minimum.
Programme affecté PR 01.

Tensions continues relevées par rapport à la masse avec un voltmètre numérique.

EMPFÄNGER :
Bei UHF Eingangspegel 1 mV, Farbbalken :
- PAL, Norm G, Weiss 100%.

Über die Scartbuchse : Eingangspegel 1 Vss, Farbbalken :

Farbe, Kontrast, Helligkeit in der Mitte des Bereichs, Ton auf Minimum.
Zugeordnetes Programm PR 01.

Gleichspannungen mit einem digitalen Voltmeter zur Masse gemessen.

RICEVITORE :
In UHF, livello d'entrata 1 mV, monoscopio barre :
- PAL, norma G. bianco 100%.

Via SCART, livello d'entrata 1 Vpp, monoscopio barre :

Colore, Contrasto, Luminositá media, Suono minimo.
Programma selezionato PR 01.

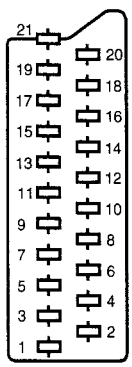
Tensioni continue rilevate rispetto alla massa con un voltmetro digitale.

RECEPTOR :
En UHF, nivel de entrada 1 mV, mira de barras :
- PAL, norma G, blanco 100%.

Por la toma Peritelevision, nivel de entrada 1 Vpp mira de barra.

Color, Contraste, luz a mitad de carrera, Sonido mínimo.
Programa afectado PR 01.

Tensiones continuas marcadas en relacion a la masa con un voltimetro digital.



		ENGLISH	FRANÇAIS	DEUTSCH	ITALIANO	ESPAÑOL
1	⊖→	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
2	⊖	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
3	⊖→	AUDIO "L"	AUDIO "G"	AUDIO "L"	AUDIO "S"	AUDIO "I"
4	⊥	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
5	⊥	"BLUE"	"BLEU"	"BLAU"	"BLU"	"AZUL"
6	⊖	AUDIO "L" MONO	AUDIO "G" MONO	AUDIO "L" MONO	AUDIO "S" MONO	AUDIO "I" MONO
7	⊖	"BLUE"	"BLEU"	"BLAU"	BLU	AZUL
8	⊖	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	"COMMUTAZIONE LENTA"	"CONMUTACION LENTA"
9	⊥	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
10	⊖⊖→	AV LINK	AV LINK	AV LINK	AV LINK	AV LINK
11	⊖	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
12	NC					
13	⊥	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
14	NC					
15	⊖	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
16	⊖	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
17	⊥	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
18	⊥	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
19	⊖→	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
20	⊖	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEO ODER SYNCHRO	VIDEO O SINCRO	VIDEO O SINCRO
21	⊖→	PLUG SCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	INVOLUCRO METAL-LICO DELLA PRESA	BLINDAJE DEL ENCHUFE

NOTE : (MAIN) *... etc. identifies each* pcb module.

NOTE : (MAIN) *... etc. repères des platines constituant l'appareil.*

HINWEIS : (MAIN) *... usw. Kennzeichnung der Platinen, aus denen das Gerät zusammengesetzt ist.*

NOTA : (MAIN) *... ecc. sigla delle piastre dell' apparecchio.*

NOTA : (MAIN) *... etc. marcas de las placas que constituyen el aparato.*

⊖ : INPUT - ENTRÉE - EINGANG - ENTRATA - ENTRADA • ⊖→ : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA • ⊥ : EARTH - MASSE - MASSE - MASSA - MASA

INFORMATION - INFORMATIONS - INFORMATIONEN
INFORMAZIONE - INFORMACIONES

(EN) Chassis group table
1 - The electronic chassis configuration (modules) and schematic diagram page numbers.
2 - The chassis configuration.

(FR) Le tableau ci-dessous regroupe :
1 - L'environnement électronique de chaque chassis (modules) et le numéro de page où il est décrit.
2 - La désignation des chassis

(DE) Die nachstehendeTabelle umfaßt:
1 - Die elektronischen Baugruppen (Module) der Chassis varianten und die Seiten auf der sie beschrieben werden
2 - Die Chassisbezeichnung

(IT) La tabella qui di seguito contiene:
1 - l'ambiente elettronico di ogni telaio (moduli) e il numero di pagina nella quale è descritto.
2 - La descrizione dei telai

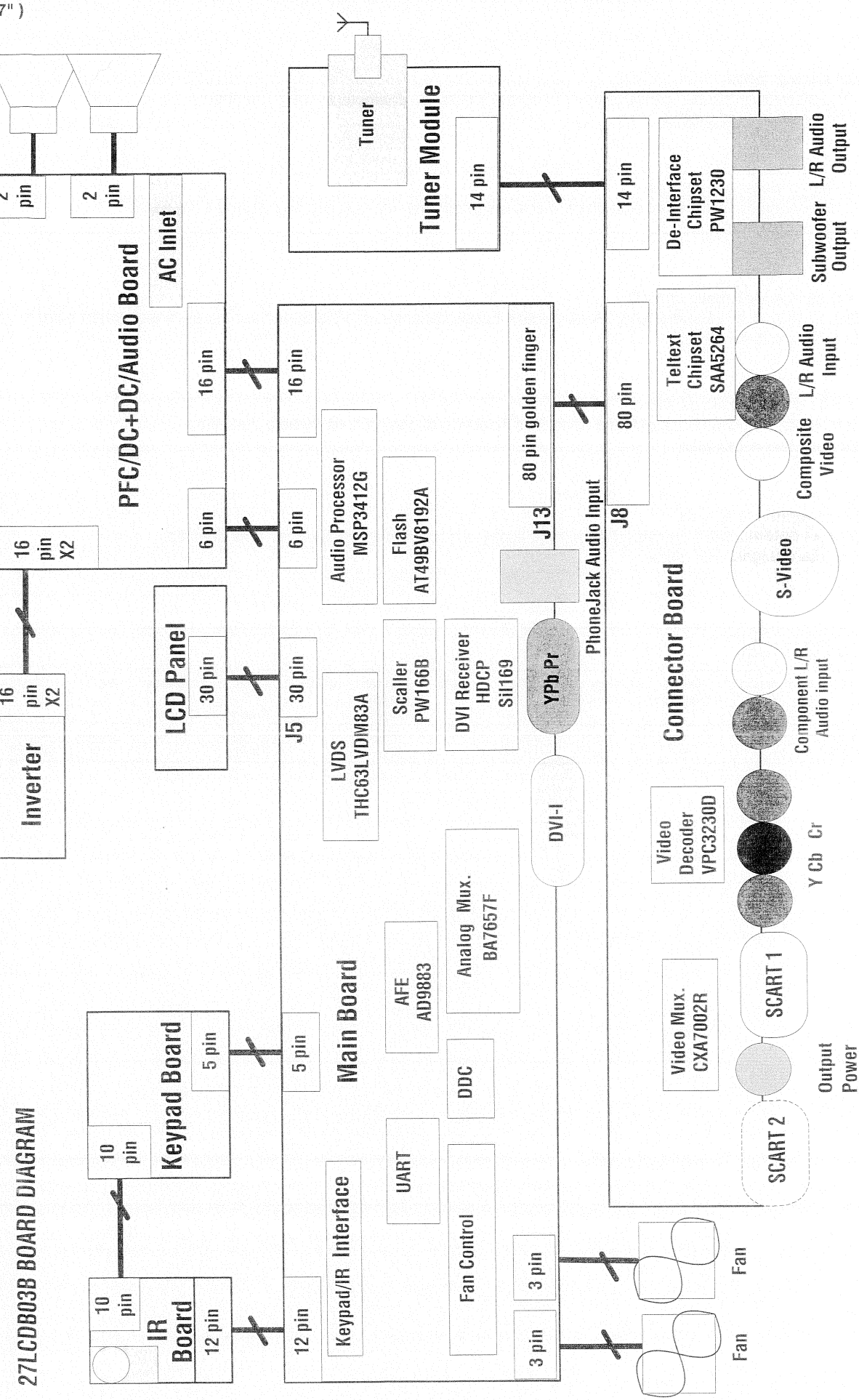
(ES) El cuadro siguiente agrupa:
1 - El entorno electrónico de cada chasis (módulos) y el número de página donde está descrito.
2 - La designación de los chasis

Chassis LCD03B

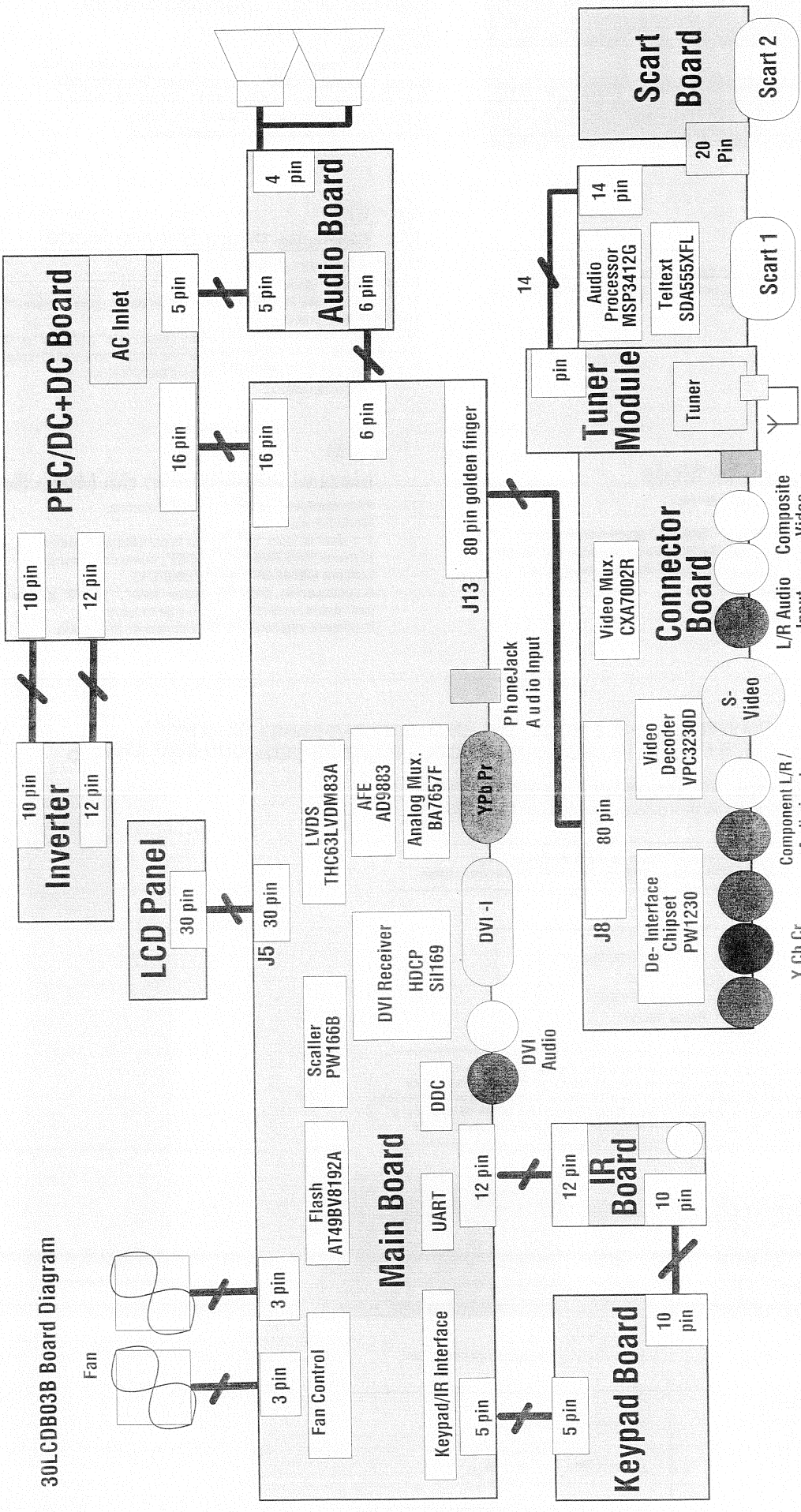
Reference	Information	Block Diagram	Service Mode	FCB -	KDB -	Inverter Power Supply	DC/DC --	Audio Board	Earphone Board	Main	Video
27LCDB03B/BK	3	4	6to11	12to14	-	15to20	-	21to22	-	23to44	45to58
30LCDB03B/BK	3	5	6to11	12to14	-	15to20	-	21to22	-	23to44	45to58

BLOCK DIAGRAM - SCHEMA SYNOPTIQUE - BLOCKSCHALTBILD
SCHEMA A BLOCCHI - ESQUEMA DE BLOQUES

(27")



(30")


30LCDB03B Board Diagram
Fan
3 pin
3 pin
Fan Control
5 pin
5 pin
Keypad/IR Interface
Keypad Board
10 pin
10 pin
IR Board
12 pin
12 pin
UART
DDC
Flash AT49BV8192A
Scaller PW166B
DVI Receiver HDCP Sil169
DVI -I
DVI Audio
Main Board
J5
30 pin
30 pin
LCD Panel
LVDS THC63LVDM83A
AFE AD9883
Analog Mux. BA7657F
YPb Pr
PhoneJack Audio Input
J13
80 pin golden finger
6 pin
16 pin
16 pin
10 pin
12 pin
PFC/DC+DC Board
AC Inlet
5 pin
5 pin
Inverter
10 pin
12 pin
4 pin
6 pin
Audio Board
14
pin
Tuner Module
Tuner
Audio Processor MSP3412G
Teltext SDA555XFL
14 pin
20 Pin
Scart Board
Scart 1
Scart 2
Video Mux. CXA7002R
J8
80 pin
De- Interface Chipset PW1230
Video Decoder VPC3230D
S-Video
Component L/R / Audio input
L/R Audio Input
Composite Video
Y Cb Cr
Connector Board

SERVICE MODE - MODE SERVICE - SERVICE-MODE - MODO SERVICIO

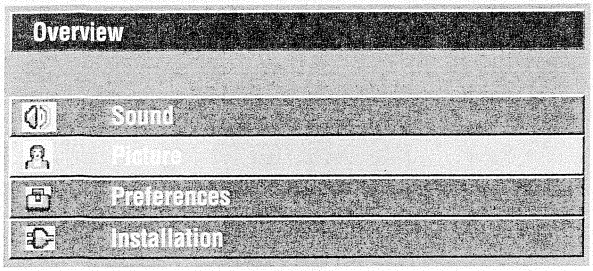


Figure Overview OSD

(EN)

Service Mode Operation Manual

Model support: **27" and 30"** bi-sonic
Service Mode
1. Press the **"menu"** button, and then the screen display will appear **"Overview"** OSD, below as Figure Overview OSD. Then press the **"info"** button and **"1"**, **"0"**and **"3"** buttons step by step to enter **Service Mode**. And Figure Service mode will appear on the screen display.

(FR)

Mode Service
Modeles: 27" et 30".
1.Presser la touche **"Menu"** l'ecran de selection ci-dessus apparait Presser la touche **"Info"**, la touche **"1"** puis les touches **"0"** et **"3"** pour acceder au **"Mode Service"**

(IT)

Manuale Procedura Service Mode

Modelli: **27" e 30"** bi-colonna
Service Mode
1. Premere il tasto **"menu"** per far visualizzare il menu **"Sommario"**, vedi pagina OSD.
Poi premere sequenzialmente i tasti **"info"** , **"1"**, **"0" e "3"** per entrare in Service mode. Il menu di Service mode verrà visualizzata sullo schermo.
Per cambiare pagina premere il tasto "Menu".
Menu Sommario

(DE)

Anleitung Service Mode

Für Modelle: **27" und 30"** bi-sonic
Service Mode
1. Drücken sie die **„MENU"** – Taste. Es erscheint das **„Übersicht"** –Menü (siehe Abbildung 1). Drücken sie dann nacheinander die Tasten „INFO", **„1", „0", und „3"**. Die erste Seite des **Service-Mode**s wird angezeigt (siehe Abbildung 2).

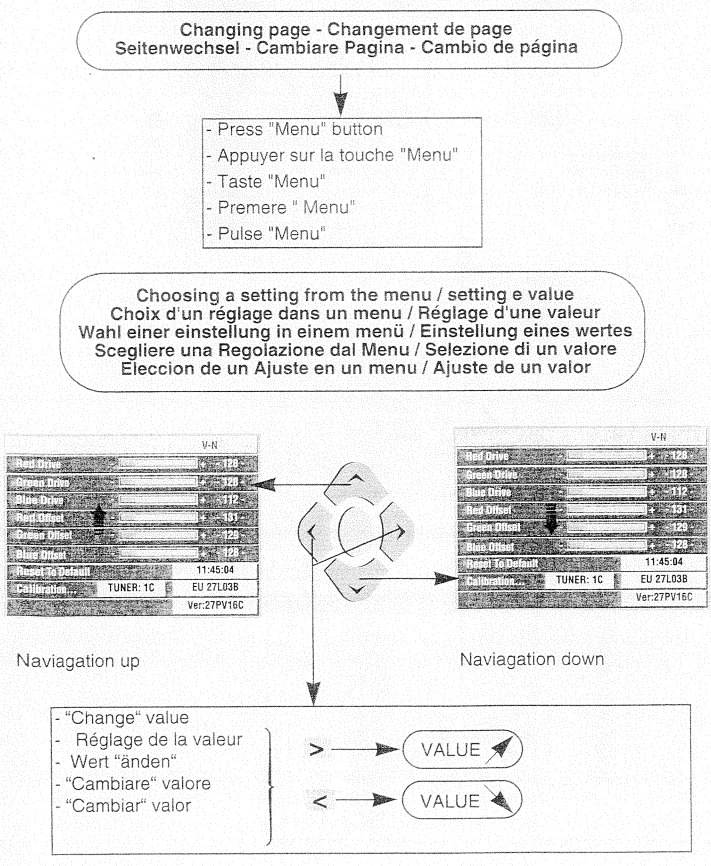
(ES)

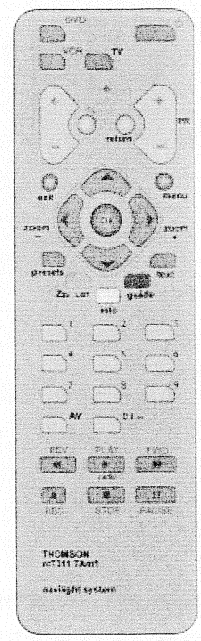
Manual de operación del Modo Servicio

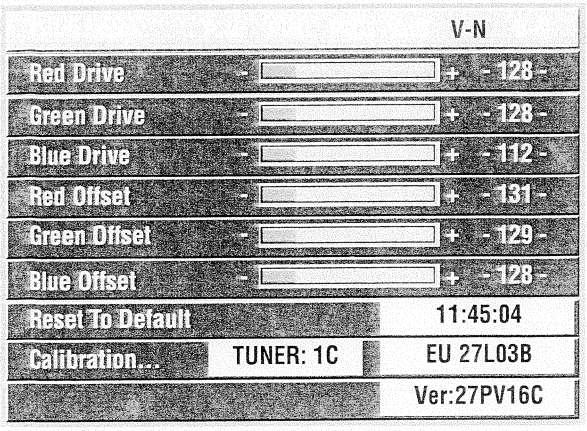
Para modelos de : 27" y 30" bi-columna
Modo Servicio
1. Pulsar la tecla **"menú"**, en la pantalla se mostrará el menú **"OVERVIEW (ÍNDICE)"**, como se muestra en la figura **MENU OVERVIEW (ÍNDICE)**.
A continuación, pulsar las teclas **"info"**, **"1"**, **"0" y "3"** una tras otra para entrar en Modo Servicio y se mostrará la primera página del Modo Servicio en la pantalla.

NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE
SUCHE IN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

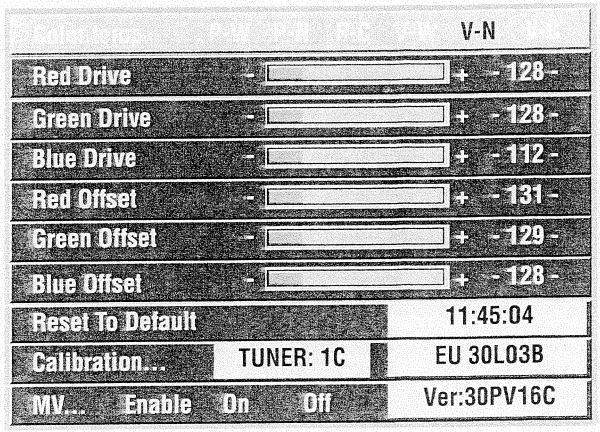
REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG
TELECOMANDO - MANDO A DISTANCIA


Changing page - Changement de page
Seitenwechsel - Cambiare Pagina - Cambio de página
- Press "Menu" button
- Appuyer sur la touche "Menu"
- Taste "Menu"
- Premere " Menu"
- Pulse "Menu"
Choosing a setting from the menu / setting e value
Choix d'un réglage dans un menu / Réglage d'une valeur
Wahl einer einstellung in einem menü / Einstellung eines wertes
Scegliere una Regolazione dal Menu / Selezione di un valore
Eleccion de un Ajuste en un menu / Ajuste de un valor
Naviagation up
Naviagation down
- "Change" value
- Réglage de la valeur
- Wert "änden"
- "Cambiare" valore
- "Cambiar" valor
VALUE
VALUE




V-N
Red Drive - + - 128 -
Green Drive - + - 128 -
Blue Drive - + - 112 -
Red Offset - + - 131 -
Green Offset - + - 129 -
Blue Offset - + - 128 -
Reset To Default
11:45:04
Calibration...
TUNER: 1C
EU 27L03B
Ver:27PV16C

Page1 on service mode (27")


V-N
Red Drive - + - 128 -
Green Drive - + - 128 -
Blue Drive - + - 112 -
Red Offset - + - 131 -
Green Offset - + - 129 -
Blue Offset - + - 128 -
Reset To Default
11:45:04
Calibration...
TUNER: 1C
EU 30L03B
MV... Enable On Off
Ver:30PV16C

Page1 on service mode (30")

(EN)

1. **Color Temp: P-N** means "Normal" on YpbPr, **V-N** means "Normal" on Video mode. Each item decide different gamma curve.
2. **Red drive, Green drive and blue drive** means gamma RGB gain. Control by scaler
3. **Red offset, Green offset and blue offset** means gamma RGB offset. Control by scaler
4. **Reset To Default:** press **OK** will load all default value on **User OSD**
5. **Calibration:** press this botton guide to calibrate A/D converter white and black level on PC input. Also guide to calibrate A/D converter PbPr offset on YpbPr input.
6. **MV enable: (30")** designer debug tool revision
(this is information only)

(FR)

1. **Color Temp:** Temperature des couleurs.
P-N correspond à un reglage "Normal" /YpPr
V-N correspond à un reglage "normal" / mode vidéo
chaque item permet de règler la courbe de gamma.
2. **Red drive, Green drive and blue drive:** green drive et Bleu drive correspond aux reglages de gain
du gamma RVB (controlé par le scaler).
3. **Red offset, green offset et blue offset:** correspond aux réglage d'offset du gamma RVB (controlé par le scaler).
4. **Reset To Default:** Appuyer sur "OK".
Charger les valeurs par defaut sur le menu OSD.
5. **Calibration:** Appuyer sur "OK" pour valider.
Etalonne les niveaux blanc et noir du convertisseur A/D de l' entrée PC
Etalonne egalement les offset Pb/Pr du convertisseur A/D sur l' entrée Ypb Pr.
6. **MV enable:** Port Vidéo Chip 323 (Seulement Utilisé pour le debuggage en conception). Si vous quittez le menu usine, la fonction n'existe plus.

(DE)

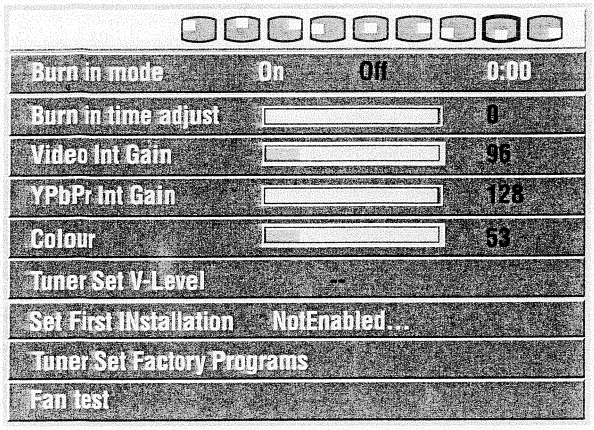
1. **Color Temp: P-W** steht für „Warm im YPbPr-Mode, **P-N** steht für „Neutral" bei YPbPr-Mode, P-C steht für „Kalt" im YPbPr,-Mode, V-W steht für „Warm" im Video-Mode, V-N steht für „Neutral" im Video-Mode, V-C steht für „Kalt" im Video-Mode. Alle Modi haben unterschiedliche Gamma-Kennlinien.
2. **Red Drive, Green Drive und Blue Drive:** Einstellung der RGB-Verstärkung
3. **Red Offset, Green Offset und Blue Offset:** Einstellung des RGB-Offsets
4. **Reset to Default:** Durch Drücken der "**OK**"-Taste werden die Benutzerdaten gelöscht und die Defaultwerte geladen.
5. **Calibration:** Kalibrieren der Schwarz- und Weißpegel des AD-Wandlers des PC-Eingangs.
6. **MV enable: (30")** Chip 323 Video-Port (Nur für Entwicklungszwecke, hat keine Funktion sobald der Produktionsmode verlassen wird.)

(IT)

1. **Color Temp:** P-N significa "Normale" in funzione YPbPr, V-N significa "Normale" in funzione Video. Ogni selezione determina una differente curva di risposta.
2. **Red Drive, Green Drive** e Blue Drive significa guadagno gamma RGB. Controllato da una scala.
3. **Red Offset, Green Offset** e Blue Offset significa Offset gamma RGB. Controllato da una scala.
4. **Reset To Default:** premendo OK verranno caricati tutti i valori di Default nel Menu Utente.
5. **Calibration:** premere questo tasto guida per calibrare il livello Bianco /Nero del convertitore A/D dell'ingresso PC. Calibra anche l'offset del convertitore A/D PbPr dell'ingresso YpbPr.
6. **MV enable: (30")** Porta video chip 232 (Sviluppato per la ricerca guasti in fabbrica; questa funzione, al di fluori del menu di fabbricca, non è attiva)

(ES)

1. **Color Temp:** P-N significa "**Normal**" en modo YpbPr, V-N significa "Normal" en modo Video. Cada elemento tiene una curva de gamma distinta.
2. **Red drive, Green drive** y Blue drive ajustan la ganancia de la gamma RGB.
3. **Red offset, Green offset** y Blue offset ajustan el offset de la gamma RGB.
4. **Reset To Default:** Al pulsar OK se cargarán todos los valores por defecto del menú de usuario
5. **Calibration:** Pulsando este botón ayuda a calibrar el convertidor A/D de nivel de blanco y negro
para la entrada de PC. También sirve para calibrar el offset del convertidor A/D PbPr en la entrada YpbPr.
6. **MV enable: (30")** puerto de vídeo c.i. 323 (uso solamente por el diseñador, si se deja el menú de fábrica, no funciona mas)



Page2 on service mode

EN

7. OSD position: OSD position selection.
8. Burn in mode: For development only. Value change is not recommended.
9. Burn in time Adjust: For development only. Value change is not recommended.
10. Video int Gain: this slider bar used to align brightness spec of Video mode. Larger value bring to brighter. Control by Video decoder VPC3230
11. YPbPr: For development only. Value change is not recommended.
12. Colour: adjust color saturation. Same funct ion on User OSD. Control by Video decoder VPC3230.
13. Tuner Set V-Level: not used
14. Tuner Get V-Level: not used.
15. Set First Installation: "Enable" means TV will pop-up installation OSD at next power-on.
16. Tuner Set Factory Programs: not used.
17. Fan test: For development only. Value change is not recommended

FR

7. OSD position: Selection de la position OSD.
8. Burn in mode: Réglage usine, ne pas modifier.
9. Burn in time Adjust: Réglage usine, ne pas modifier.
10. Video int Gain: Réglage de la lumière en mode vidéo. Contrôle par le décodeur vidéo VP"C 3230.
La position élevèe du curseur augmente la lumière.
11. YPbPr: Réglage usine, ne pas modifier.
12. Colour: Régle la saturation de la couleur.
13. Tuner Set V-Level: Pas utilisé.
14. Tuner Get V-Level: Pas utilisé.
15. Set First Installation: Signifie que la TV à la prochaine mise sous tension affichera le menu d' installation.
16. Tuner Set Factory Programs: Pas utilisé.
17. Fan test: Réglage usine, ne pas modifier.

DE

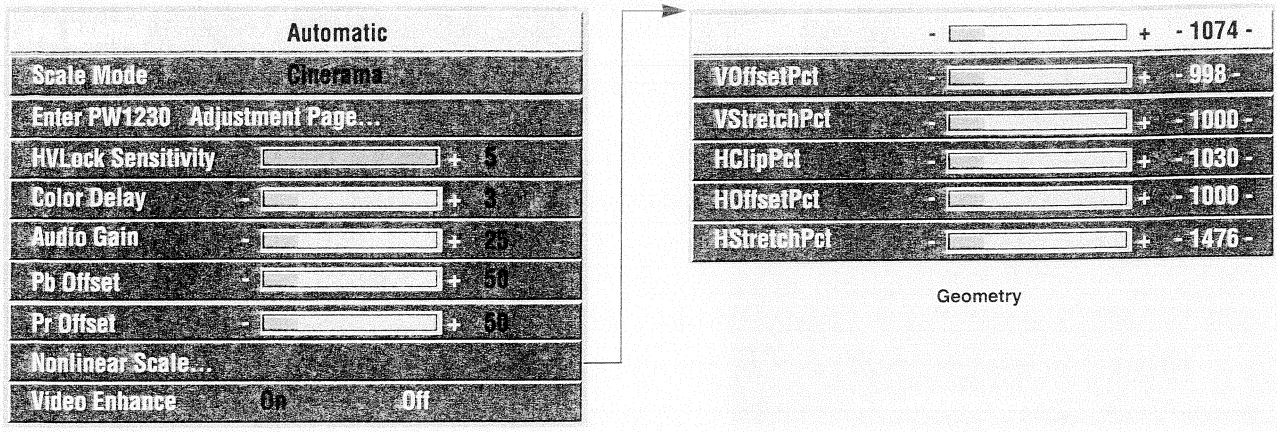
8. OSD Position: Wahl der Menü-Position auf dem Bildschirm
9. Burn in mode: Eine Änderung dieser Grundeinstellung ist nicht empfehlenswert.
10. Burn in time Adjust: Eine Änderung dieser Grundeinstellung ist nicht empfehlenswert.
11. Video Int Gain: Helligkeitsvoreinsteller für den Video-Mode. Steuerung über den Videodecoder VPC3230.
XX. YPbPr: Eine Änderung dieser Grundeinstellung ist nicht empfehlenswert.
12. Colour: Einstellung der Farbsättigung; gleiche Funktion wie die Benutzersteuerung. Steuerung über den Videodecoder VPC3230.
13. Tuner Set V-Level: nicht benutzt
14. Tuner Get V-Level: nicht benutzt
15. Set First Installation: „Enable" lässt beim nächsten Einschalten des Gerätes nach einer Netztrennung das Installationsmenü erscheinen.
16. Tuner Set Factory Programs: nicht benutzt.
17. Fan test: Eine Änderung dieser Grundeinstellung ist nicht empfehlenswert.

IT

7. OSD position: Selezione posizione OSD.
8. Burn in mode: Utilizzato per la fabbrica. Si consiglia di non cambiare valore.
9. Burn in time Adjust: Utilizzato per la fabbrica. Si consiglia di non cambiare valore.
10. Video int Gain: Regola il livello di luminosità in funzione Video. Più alto è il valore più l'immagine è luminosa. Controllo tramite il Decoder Video VPC3230.
11. YPbPr: Utilizzato per la fabbrica. Si consiglia di non cambiare valore.
12. Colour: Regola la saturazione del colore. Stessa funzione del Menu utente. Controllo tramite Video Decoder VPC3230.
13. Tuner Set V-Level: Non utilizzato.
14. Tuner Get V-level: Non utilizzato.
15. Set First Installation: "Enable" significa abilitazione, all'accensione, del menu di prima installazione.
16. Tuner Set factory Programs: Non utilizzato.
17. Fan test: Utilizzato per la fabbrica. Si consiglia di non cambiare valore.

ES

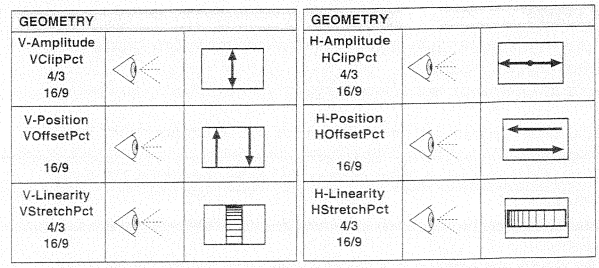
a7. OSD position: Selecciona la posición del OSD.
8. Burn in mode: No se recomienda cambiar este valor
9. Burn in time Adjust: No se recomienda cambiar este valor
10. Video int Gain: Esta barra deslizante se utiliza para ajustar las especificaciones del brillo en el modo Video. Cuanto mayor sea el valor, más brillante. Control por el descodificador de Video VPC3230
11. YPbPr: No se recomienda cambiar este valor
12. Colour: ajusta la saturación del color. Es la misma función que el menú de usuario. Control por el descodificador de Video VPC3230.
13. Tuner Set V-Level: no utilizado.
14. Tuner Get V-Level: no utilizado.
15. Set First Installation: "Enable" significa que la próxima vez que se conecte el TV aparecerá el menú de primera instalación.
16. Tuner Set Factory Programs: no utilizado.
17. Fan test: No se recomienda cambiar este valor


Automatic
Scale Mode Cinerama
Enter PW1230 Adjustment Page...
HVLock Sensitivity + 5
Color Delay + 3
Audio Gain + 25
Pb Offset + 50
Pr Offset + 50
Nonlinear Scale...
Video Enhance On Off
- + - 1074 -
VOffsetPct - + - 998 -
VStretchPct - + - 1000 -
HClipPct - + - 1030 -
HOffsetPct - + - 1000 -
HStretchPct - + - 1476 -
Geometry

EN

Page3 on service mode

18. PW Gamma: gamma curve selection. "Automatic" means pick-up proper gamma curve automatically when user choose Normal, Warm and Cool. Value change is not recommended.
19. Scale Mode: screen ratio selection.
20. Enter PW1230 Adjustment page: Deinterlacer parameters control. For development only. Value change is not recommended.
21. HV Lock Sensitivity: Tuner HV sync sensitivity. Value change is not recommended. Fake programme be detected or Real programme be skipped.
22. Color Delay: Color timing delay which only impact on Video mode. For development only. Value change is not recommended
23. Audio gain: not used.
24. Pb offset: adjust Pb offset on YpbPr input.
25. Pr offset: adjust Pr offset on YpbPr input.
These 2(25,26) Functions above could be automatically done by "Calibration" page1.



FR

18. PW Gamma: Selection de la courbe de gamma "Automatic" correspont à l'optention de la courbe de gamma appropriée quand l'utilisateur choisit la position froide, neutre, chaude ou le rendu des couleurs est meilleur.
il est deconseillé de sélectionner la position "value Change".
19. Scale Mode: Selection format d'ecran.
20. Enter PW1230 Adjustment page: Ne pas modifier. Réglage usine Contrôle les parametres " Deinterlacer".
21. HV Lock Sensitivity: Sensibilité de la Synch. HV tuner.
Il est imperatif de ne pas modifier sa valeur.
Le tuner détectera les mauvais progrmmes ou passera les programmes corréctes.
22. Color Delay: Réglage du "délai" couleur en mode vidéo.
Réglage usine, ne pas modifier.
23. Audio gain: Non utilisé.
24. Pb offset: Réglage de l'offset Pb sur l' entrée Ypb Pr.
25. Pr offset: Réglage de l'offset Pr sur l'entée Ypb Pr.
Ces 2 réglages (25, 26) sont automatiquement effectues par "calibration" de la page 1 du mode service.

IT

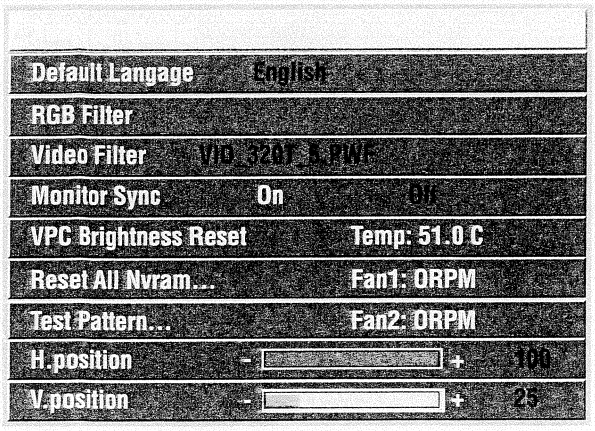
18. PW Gamma: Selezione curva gamma. In "Automatic" viene selezionata automaticamente la curva gamma ideale, in base alla scelta utente Calda, Fredda o Neutra, nella funzione Tonalità . Si consiglia di non cambiare valore.
19. Scale Mode: Selezione Rapporto schermo.
20. Enter PW Adjustment page: Controllo parametric Deinterlacer. Utiiizzato in fabbrica. Si consiglia di non cambiare valore.
21. HV Lock Sensitivity: Sensibilità Sync HV Tuner. Si consiglia di non cambiare valore. Livello soglia per saltare eventuali emittenti con segnale debole.
22. Color Delay: Regola il ritardo colore rispetto al segnale video. Utilizzato per la fabbrica. Si consiglia di non cambiare valore.
23. Audio Gain: Non utilizzato.
24. Pb offset: Regola l'offset Pb sul segnale YpbPr in ingresso.
25. Pr offset: Regola l'offset Pr sul segnale YpbPr in ingresso.
Le regolazioni menzionate nei punti 25 e 26 possono essere eseguite automaticamente come indicato nella riga "Calibration" di pagina 1.

DE

18. PW Gamma: Auswahl der Gamma-Kennlinie: Bei Einstellung „Automatic" wird automatisch die jeweilige Kennlinie gewählt, wenn der Benutzer zwischen Warm, Neutral oder Kalt umschaltet. Eine Änderung dieser Grundeinstellung ist nicht empfehlenswert.
19. Scale Mode: Wahl des Bildformates
20. Enter PW1230 Adjustment Page: Abgleich der Parameter des Deinteriacers. Eine Änderung dieser Grundeinstellungen ist nicht empfehlenswert.
21. HV Lock Sensitivity: Empfindlichkeit des Synchrondetektors im Tuner. Eine Änderung dieser Grundeinstellung ist nicht empfehlenswert, da sonst der Sendersuchlauf falsche Ergebnisse liefern könnte.
22. Color Delay: Einstellung Farbversatz. Eine Änderung dieser Grundeinstellung ist nicht empfehlenswert.
23 Audio Gain: nicht benutzt
24. Pb Offset: Einstellung des Pb Offsets bei YPbPr.
25. Pr Offset: Einstellung des Pr Offsets bei YPbPr.
Zu 26 und26: Der Abgleich dieser Funktionen kann automatisch mit der Funktion „Calibration" auf der Service-Mode Seite 1 durchgeführt werden.

ES

18. PW Gamma: Selección de la curva de gamma. "Automatic" quiere decir que recuperará automáticamente la curva ideal de gamma cuando el usuario seleccione Normal, Cálido o Frío. No se recomienda cambiar este valor.
19. Scale Mode: selecciona la relación de pantalla.
20. Enter PW1230 Adjustment page: control de los parámetros de Deinterlacer. No se recomienda cambiar este valor.
21. HV Lock Sensitivity: Sensibilidad de los sincronismos HV del sintonizador para la búsqueda de emisoras. No se aconseja cambiar este valor. Los canales reales pueden ser ignorados o los falsos memorizados.
22. Color Delay: Retardo del color en modo Video. No se recomienda cambiar este valor
23. Audio gain: no utilizado.
24. Pb offset: ajuste del offset de Pb en la entrada YpbPr.
25. Pr offset: ajuste del offset de Pr en la entrada YpbPr.
Estas 2 funciones anteriores (25,26) serán hechas automáticamente en "**Calibration**" de la página 1.



Page4 on service mode

EN

26. Auto Adjustment: auto adjustment new timing(position ,phase...etc). Only active on PC mode.
27. Default Language: set default language. Same function on User OSD.
28. RGB filter: sharpness filter of PC port of scaler. Impact on PC and YpbPr input
29. Video filter: sharpness filter of Video of scaler. Impact on TV Video and YcbCr.
30. Monitor Sync: force to **"On"**. So that **Video format** can auto detection.
31.VPC Brightness Reset: For development only. Value change is not recommended.
32. Reset All Nvram: press **"OK"** will reset all parameters on service mode, including color temp settings, brightness setting....etc.
33. Test Pattern: display test-pattern which generate by scaler. Only active on PC source.
34. H.Position: adjust horizontal position while PC source in
35. V.Position: adjust Vertical position while PC source in

IT

26. Auto Adjustment: Auto regolazione nuove temporizzazioni (posizione, fase ... etc). Attivo solo in funzione PC.
27. Default language: Seleziona la lingua. Stessa funzione del Menu Utente.
28. RGB Filter: Definizione filtro del demoltiplicatore (scaler) della porta PC. Influisce sugli ingressi PC e YpbPr.
29. Video Filter: Definizione filtro del demoltiplicatore del segnale Video. Influisce sui segnali TV Video e YcbCr.
30. Monitor Sync: Forzato su **"On"**. In questo modo può essere rilevato automaticamente il Formato Video.
31.VPC Brightness Reset: Utilizzato per la fabbrica. Si consiglia di non cambiare valore.
32. Reset All Nvram: Premendo **"OK"** verranno resettati tutti I parametri del Service Mode, inclusi regolazione Temp. Colore, Regolazione Luminosità, ... ecc.).
33. Test Pattern: Attivazione serie di segnali test. Attivo solo con ingresso PC.
34. H. Position: Regola la posizione Orizzontale in ingresso PC.
35. V. Position: Regola la posizione Verticale in ingresso PC.

FR

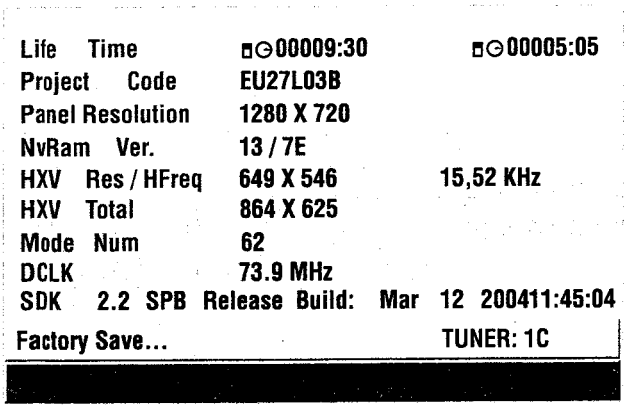
26.Auto Adjustment: Actif seulement en mode PC. Auto réglage des nouveaux parametres de temps (Position, phase..).
27. Default Language: Selectionne la langue par défaut. Même fonction que le réglage utilisateur.
28. RGB filter: Filtre Contour RGB du Port PC.
29. Video filter: filtre contour Vidéo. Agit sur les entrées TV Vidéo et Ye bCr.
30. Monitor Sync: Forcé à ON Auto détection du format Vidéo.
31.VPC Brightness Reset: Réglage usine, ne pas modifier.
32. Reset All Nvram: Appui sur "OK".
Reset De tous les parametres du "MODE SERVICE" incluant la tempèrature de couleur, Contour... etc.
33. Test Pattern: Affichage de la mire interne. Actif seulement en mode PC
34. H.Position: Réglage Horizontal en mode PC.
35. V.Position: Réglage Vertical en mode PC.

ES

26. Auto Adjustment: Autoajuste de nuevo timing (posición, fase...etc). Sólo activo en modo PC.
27. Default Language: selecciona el idioma por defecto. Hace la misma función que el menú "Usuario".
28. RGB filter: filtro de nitidez. Válido para las entradas de PC e YpbPr.
29. Video filter: filtro de nitidez. Válido para las entradas de TV, Video e YcbCr.
30. Monitor Sync: forzado a "On". El formato de video puede ser autodetectado.
31.VPC Brightness Reset: No se recomienda cambiar este valor
32. Reset All Nvram: pulsando "OK" se borrarán todos los parámetros del Modo Servicio, incluyendo los ajustes de temperatura de color, ajustes de brillo y contraste....., etc.
33. Test Pattern: muestra unas cartas de ajuste generadas internamente. Activo solamente en modo PC.
34. H. Position: ajusta la posición horizontal sobre la entrada PC.
35. V. Position: ajusta la posición Vertical sobre la entrada PC.

DE

26. Auto Adjustment: Automatischer Abgleich von Timing, Lage, Phase usw. im PC-Mode
27. Default Language: Auswahl der Menüsprache; gleiche Funktion wie die Benutzersteuerung.
28. RGB Filter: Abgleich des Schärfefilters des Scalers für PC-Mode und YPbPr.
29. Video Filter: Abgleich des Schärfefilters des Scalers für den Video-Mode.
30. Monitor Sync: Sollte immer auf **„On"** stehen damit das **Videoformat** automatisch erkannt wird.
31.VPC Brightness Reset: Eine Änderung dieser Grundeinstellung ist nicht empfehlenswert.
32. Reset All Nvram: Drücken der **„OK"**-Taste setzt alle Parameter im Service-Mode (auch Farbtemparatur, Helligkeit usw.) zurück.
33. Test Pattern: Zeigt ein vom Scaler erzeugtes Testmuster auf dem Bildschirm. Nur im PC-Mode.
34. H.Position: Horizontallage für PC-Eingang.
35. V.Position: Vertikallage für PC-Eingang.


Life Time 00009:30 00005:05
Project Code EU27L03B
Panel Resolution 1280 X 720
NvRam Ver. 13 / 7E
HXV Res / HFreq 649 X 546 15,52 KHz
HXV Total 864 X 625
Mode Num 62
DCLK 73.9 MHz
SDK 2.2 SPB Release Build: Mar 12 200411:45:04
Factory Save... TUNER: 1C

Page5 on service mode

(EN)

36. Life Time: The left item means the time added by stand by + TV on
The right item display the time of TV-on only.
37. Project Code: as title
38. Panel Resolution: as title
39. NvRam Ver. Display EEPROM data veriosn.
40. HXV Res / Hfreq: timing information. Resolution and H clock
41. HXV Total: timing information.
42. Mode Num: timing information. Sequence of Timing chart.
43. DCLK: timing information. Data clock
These (41,42,43,and 44) items above are for development check only.
44.SDK: Designer debug tool revision (this is information only)
45. Factory save: save factory parameters.

(IT)

36. Life Time: Il contatore a sinistra indica il tempo totale di funzionamento in Stand By + apparecchio acceso. Il contatore a destra indica il tempo totale di funzionamento ad apparecchio acceso **(ON)**.
37. Project code: Codice progetto.
38. Panel Resolution: Risoluzione pannello.
39. NvRam Ver: Versione EEPROM.
40. HXV res / Hfreq: Informazione timing. Risoluzione e Clock H.
41. HXV Total: Informazioni timing.
42. Mode Num: Informazioni Timing. Sequenza carta tempi.
43. DCLK: Informazioni Timing. Clock Data.
I valori menzionati nei punti 41, 42 43 e 44 sono solo per la fabbrica
44.SDK: Funzione, per la fabbrica, di ricerca guasti
(solo per informazone)
45. Factory save: Parametri memorizzati in fabbrica.

(FR)

36. Life Time:
-Indication de gauche:
indique le temps fonctionnement total du TV: On+ Stand by.
-Indication de droite:
Indique le temps de fonctionnement du TV en On seulement.
37. Project Code: Info code.
38. Panel Resolution: Resolution du panneau d'écran.
39. NvRam Ver. Version EEPROM.
40. HXV Res / Hfreq: Information de temps resolution et Horloge H.
41. HXV Total: Information de temps.
42. Mode Num: Information de temps
43. DCLK: Information de temps.Data clock.
Ces 4 lignes d'information sont utilisées en développement.
44.SDK: Version de l'outil de debuggage.
45. Factory save: Sauvegarde les paramétres usine.

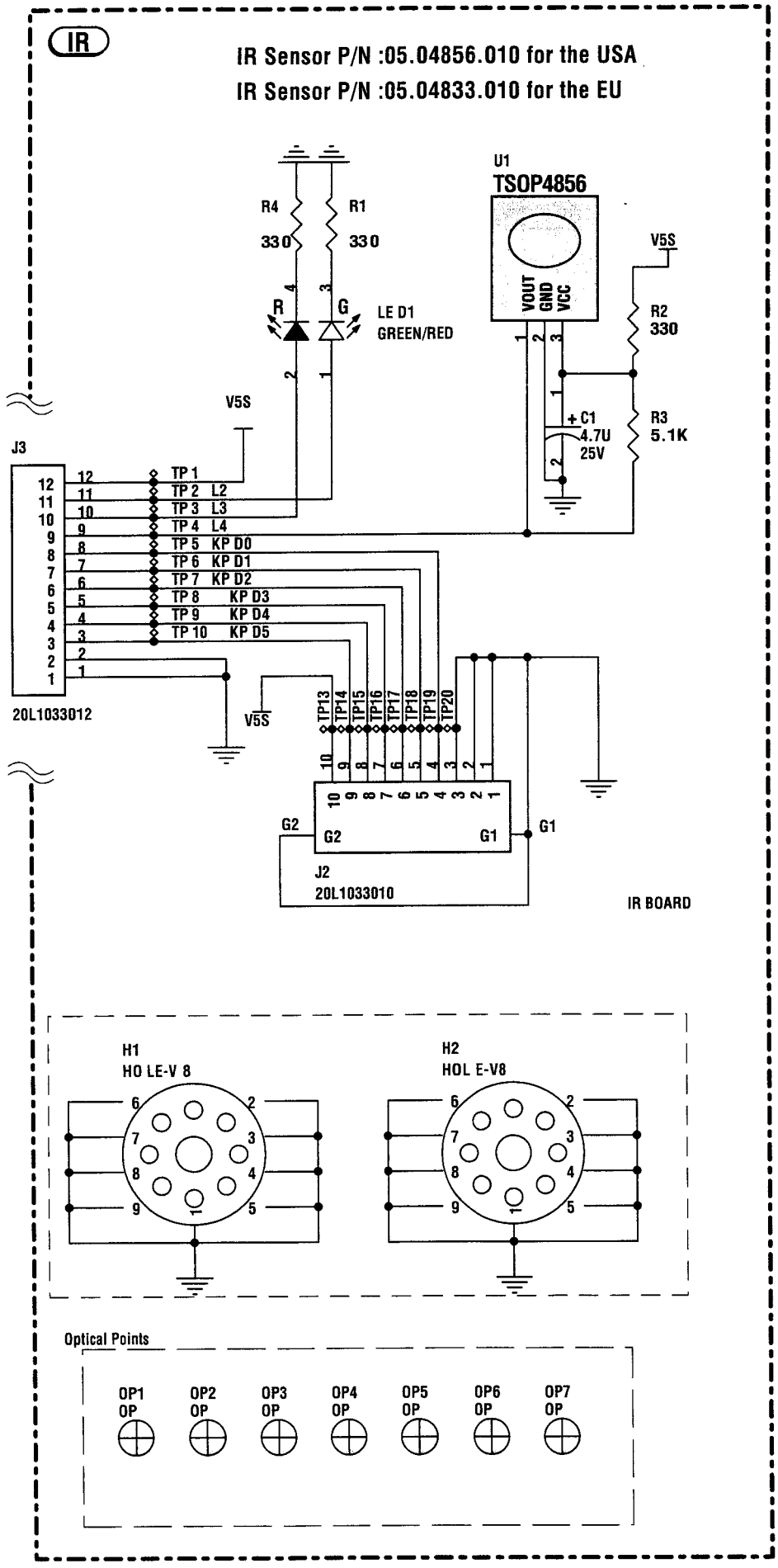
(ES)

36. Life Time: Los números de la izquierda muestran la suma de las horas en stand-by + TV encendido. Los de la derecha indican sólo las horas de TV encendido.
37. Project Code: informativo
38. Panel Resolution: informativo
39. NvRam Ver. Indica la versión de la EEPROM.
40. HXV Res / Hfreq: información de timing. Resolución y frecuencia H.
41. HXV Total: información de timing.
42. Mode Num: información de timing.
43. DCLK: información de timing. Frecuencia del reloj.
Estas 4 funciones anteriores (41,42,43,y 44) son informativas. Sólo son para comprobación.
44.SDK: Herramienta para la revisión de los defectos de diseño (sólo para información)
45. Factory save: memoriza los valores de fábrica.

(DE)

Seite 5 des Service-Modes
36. Life Time: Betriebsstundenzähler, links: Summe Standby-Zeit und TV-Ein, rechts: nur TV-Ein-Zeit.
37. Project Code:
38. Panel Resolution: Auflösung der LCD-Panels
39. NvRam Ver. : Version EEPROM-Daten
40. HXV Res / HFreq: Timing-Information (Auflösung und H-Clock)
41. HXV Total: Timing Information
42. Mode Num Timing Information
43. DCLK: Timing Information Data Clock
44.SDK: Version des Entwicklungsdebugtools (nur zur Information).
45. Factory Save: Daten des Service-Modes speichern.

(IR PREAMPLIFIER 20"BI)



CONTROL BOARD 27",30")

KB

12V

R1 10K

R9 1K

Q1 2N3 906

C1 5 100U 16V

C1 6 100U 16V

J2 => J8 Main Board

G2 / G1

TP 1 EAR_MUTE

TP 2 Audio_R

TP 3

TP 4 Audio_L

TP 5

12V

R1 0 51.1KF

C9 10U 16V

R1 1 51.1KF

C4 10U 16V

R2 10K

R8 1K

R7 1K

C1 2 100U 16V

C1 3 100U 16V

U1 TDA2822D

C1 0 100U 16V

C1 1 100U 16V

R5

R1 2 39 4.7

R6

C6 0.1U 25V K

R1 3 39 4.7

C7 0.1U 25V K

D1 TZMC 5V1

D2 TZMC 11

D3 TZMC 5V1

D4 TZMC 5V1

D5 TZMC1 1

D6 TZMC 5V1

C1 1000P

C2 1000P

C3 1000P

12V

J1

R1 4 47K

D7 1N4148

Q2 2N3 904

R3 10K

R4 10K

Q3 2N3904

C1 4 100U 16V

R1 5 10K

J3 => J2 IR BOARD

V5S

G2 / G1

TP 6

TP 7 KP D0

TP 8 KP D1

TP 9 KP D2

TP 10 KP D3

TP 11 KP D4

TP 12 KP D5

TP 13

TP 14

TP 15

SW6 SW5 SW4 SW3 SW2 SW1

V5S

KEYPAD BOARD

H1 HOLE -V8

H2 HOLE -V8

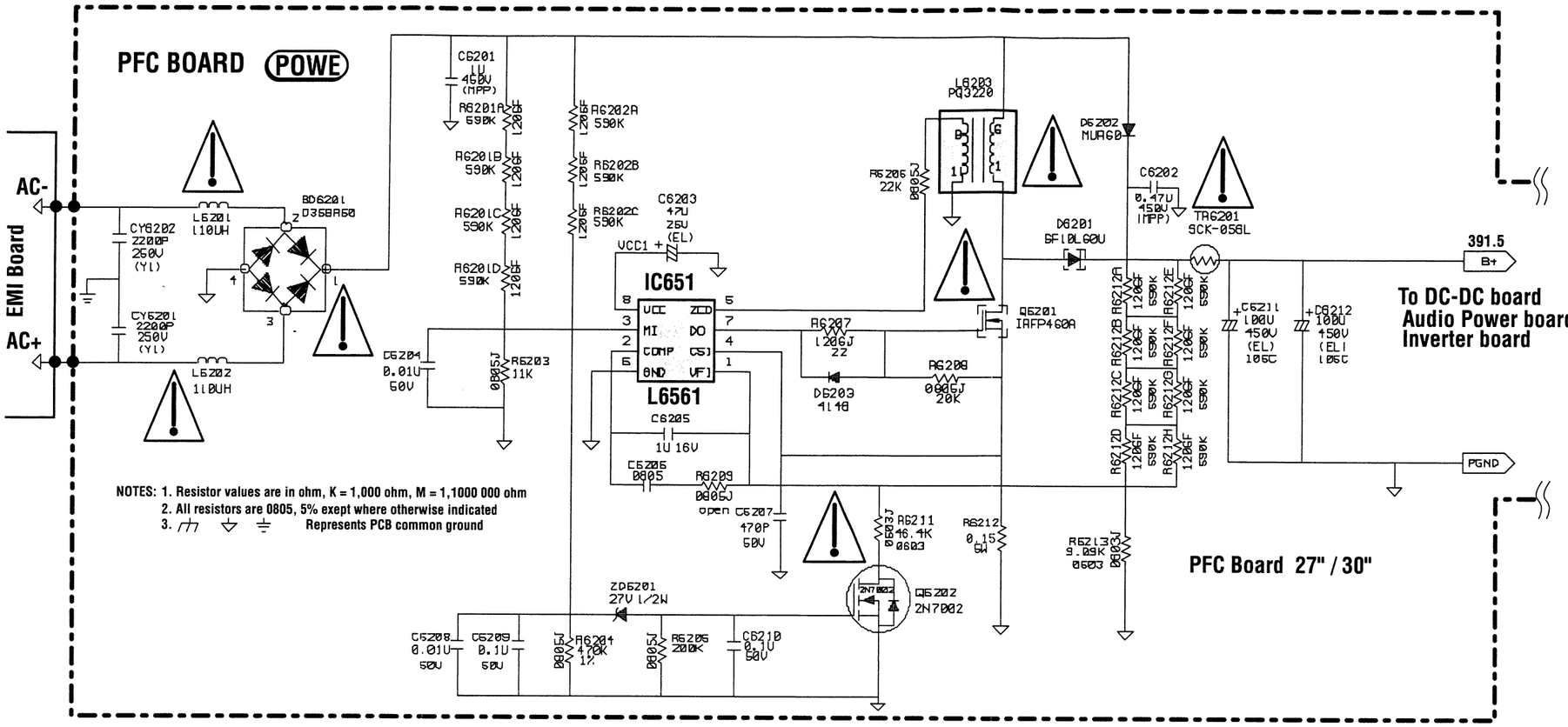
Optical Points

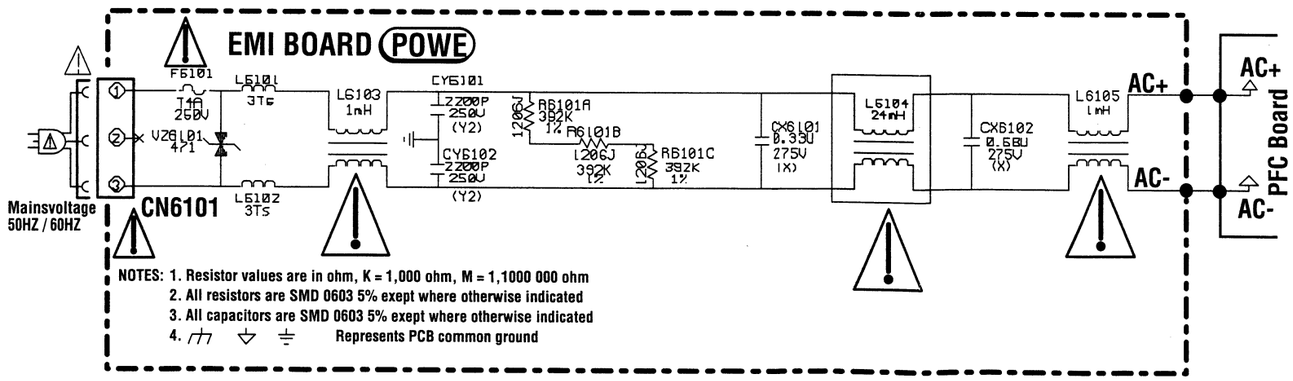
OP1 OP2 OP3 OP4 OP5 OP6 OP7

OP8 OP9 OP10 OP11 OP12 OP13 OP14

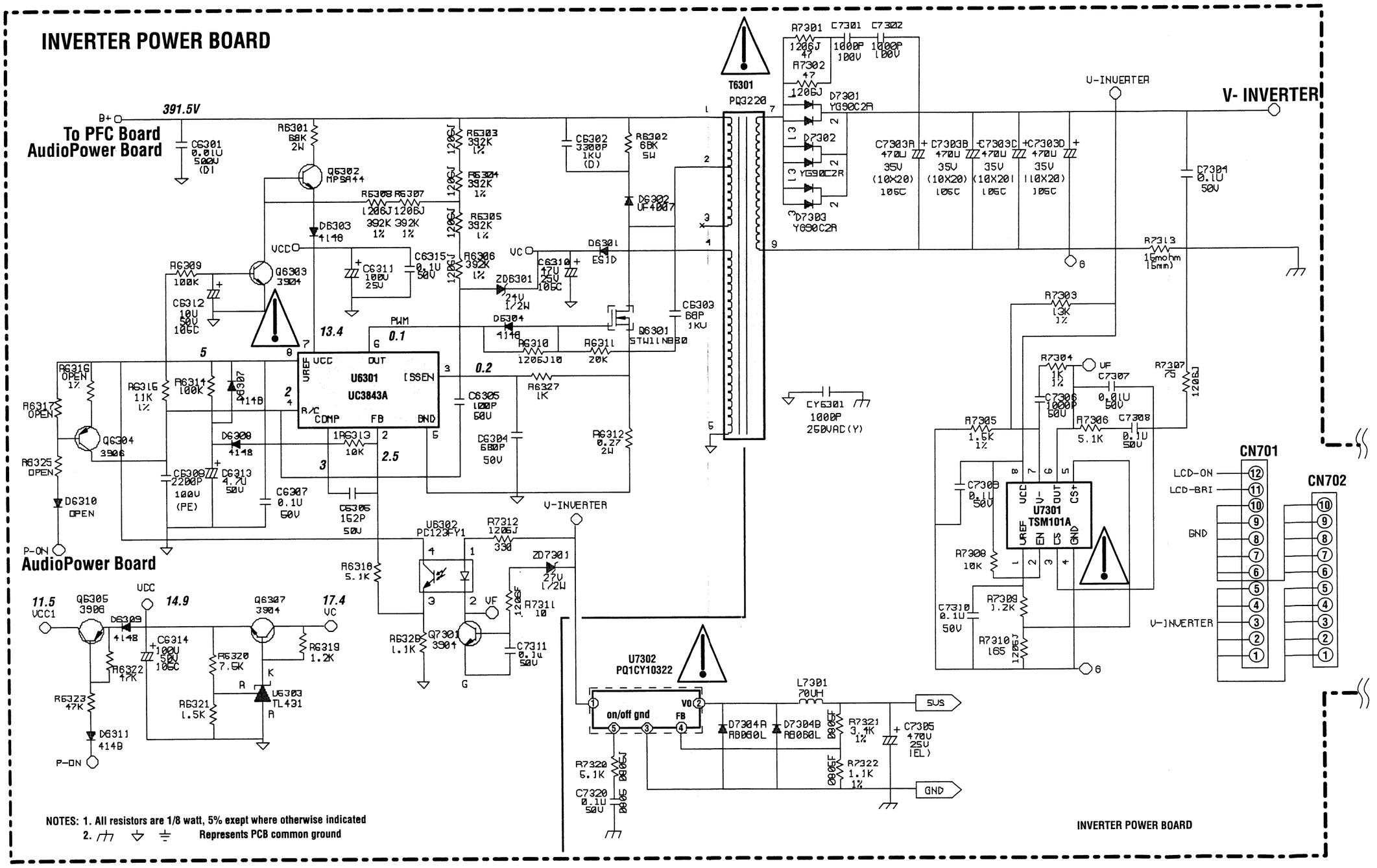
POWER SUPPLY INTERFACE - INTERFACE ALIMENTATION - NETZTEIL - ALIMENTAZIONE - INTERFAZ ALIMENTACION

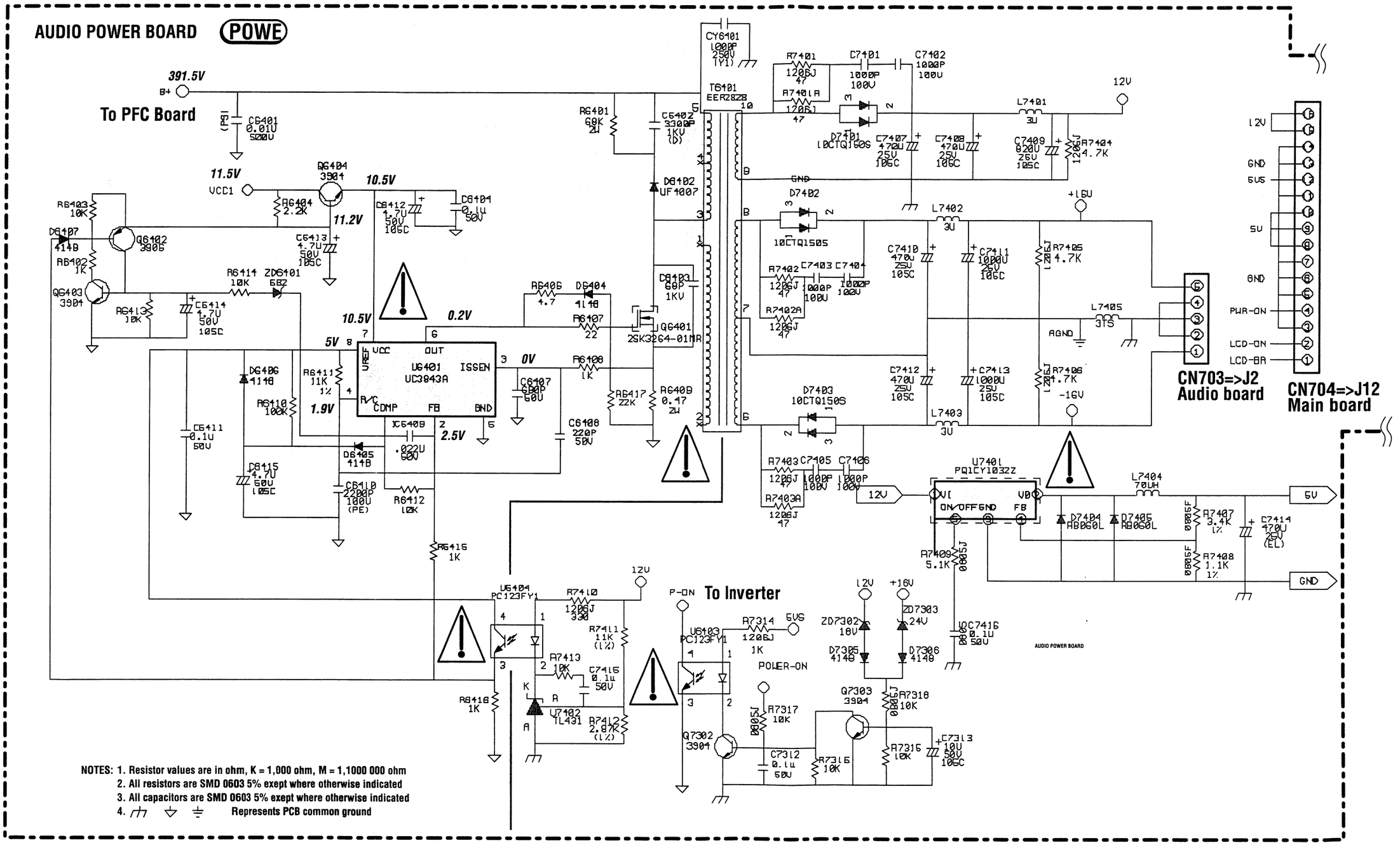
SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA




EMI BOARD POWE
F6101 T1A 250V
L6101 3TS
L6102 3TS
CN6101
Mainsvoltage 50HZ / 60HZ
VZ6101 471
LG103 1mH
CY6101 2200P 250V (Y2)
CY6102 2200P 250V (Y2)
RB101A 392K 1%
RB101B 392K 1%
RB101C 392K 1%
CX6101 0.33U 275V (X)
L6104 24mH
CX6102 0.68U 275V (X)
L6105 1mH
AC+
AC-
PFC Board
NOTES: 1. Resistor values are in ohm, K = 1,000 ohm, M = 1,1000 000 ohm
2. All resistors are SMD 0603 5% exept where otherwise indicated
3. All capacitors are SMD 0603 5% exept where otherwise indicated
4. Represents PCB common ground

(INVERTER 27", 30")

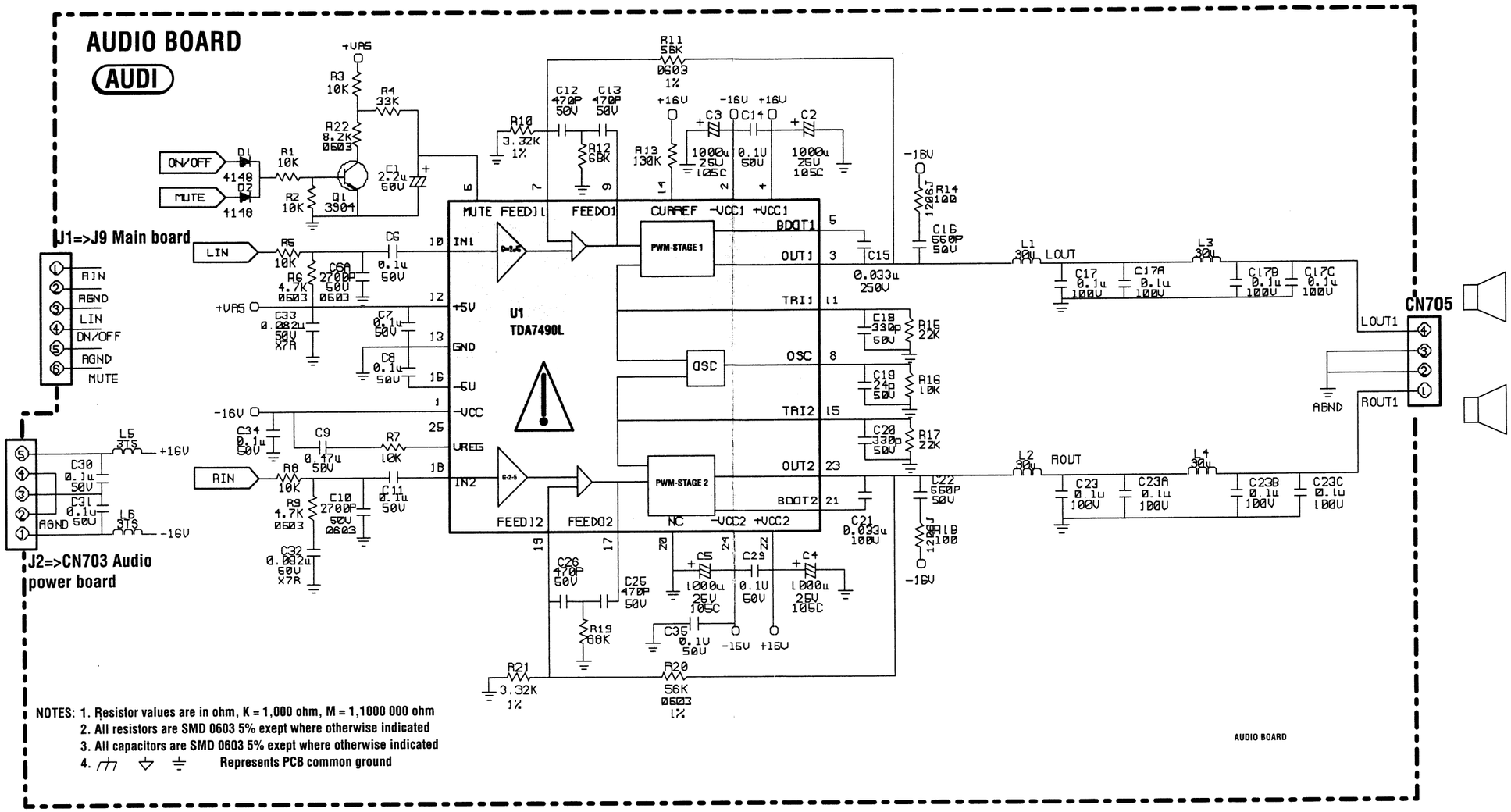




NOTES: 1. Resistor values are in ohm, K = 1,000 ohm, M = 1,1000 000 ohm
2. All resistors are SMD 0603 5% exept where otherwise indicated
3. All capacitors are SMD 0603 5% exept where otherwise indicated
4. Represents PCB common ground

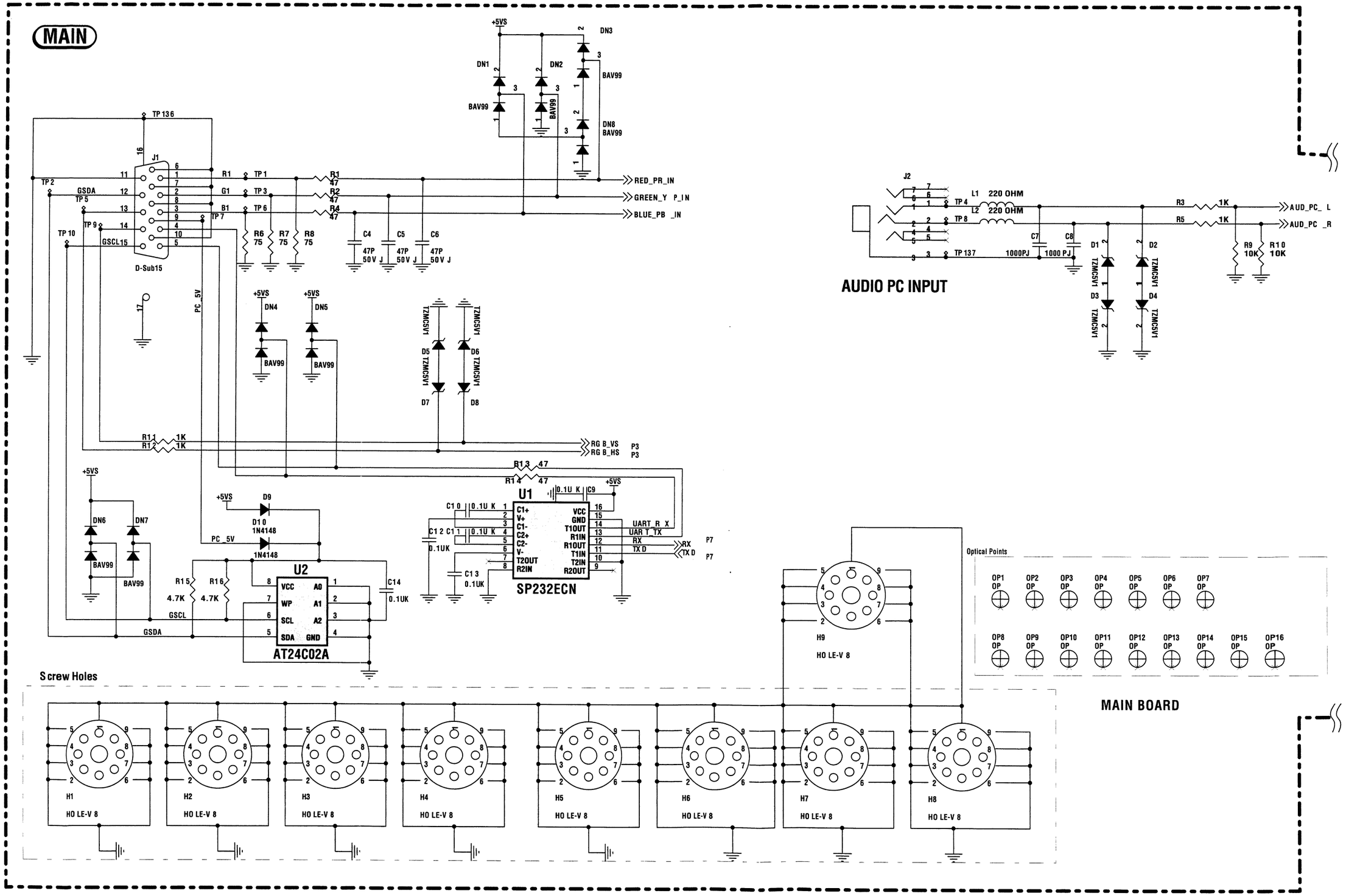
AUDIO CHANNEL SCHEMATIC DIAGRAM - SCHEMA DES CIRCUITS AUDIO - SCHALTBILD MEHRKANAL AUDIO - SCHEMA DEI CIRCUITI AUDIO - ESQUEMA DE LOS CIRCUITOS AUDIO

(AUDIO 27",30")



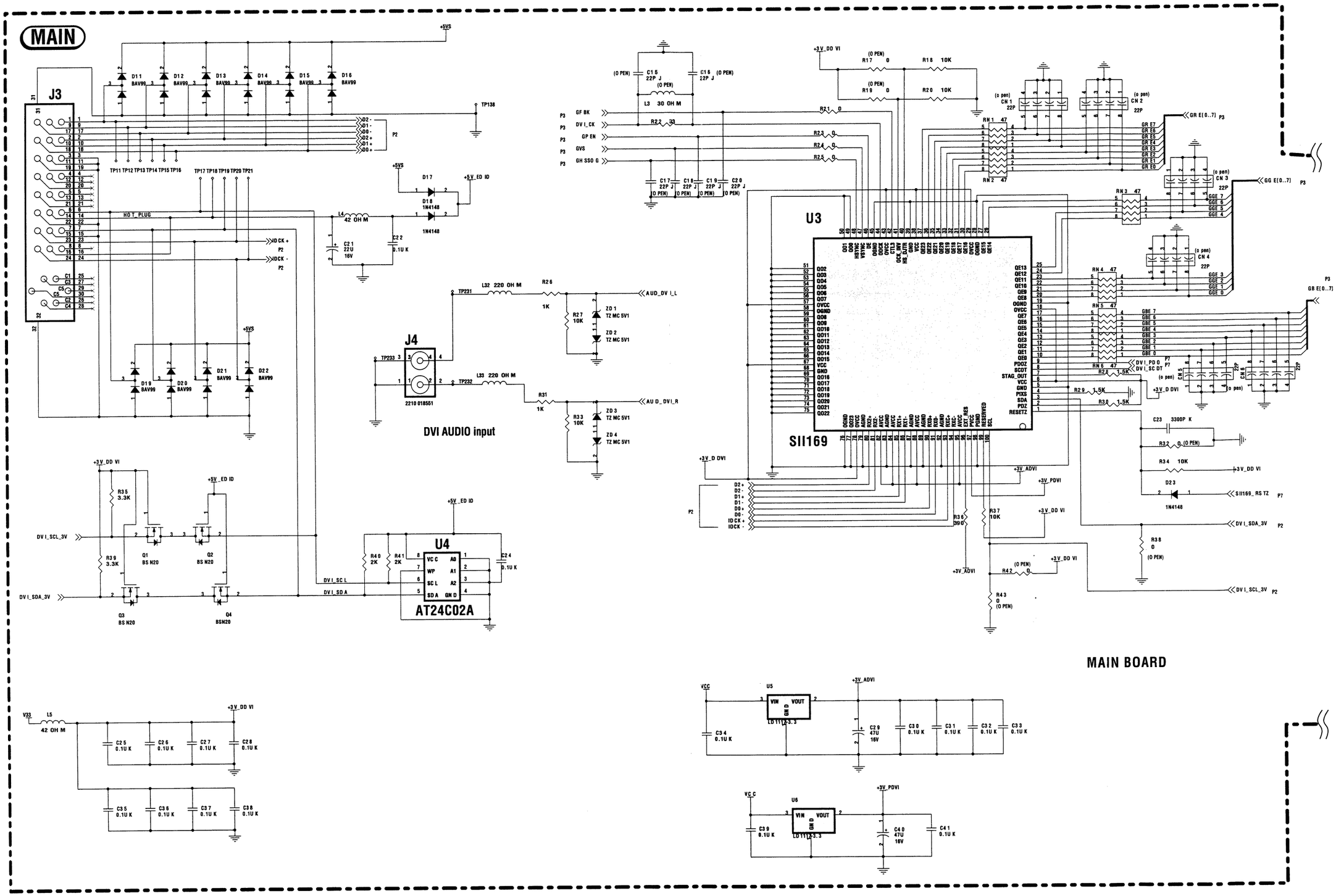
MAIN BOARD INTERFACE - INTERFACE MAIN BOARD - SCHALTBILD MAIN BOARD - SCHEMA DELLA MAIN BOARD INTERFAZ MAIN BOARD

(MAIN BOARD 1/11-27",30")



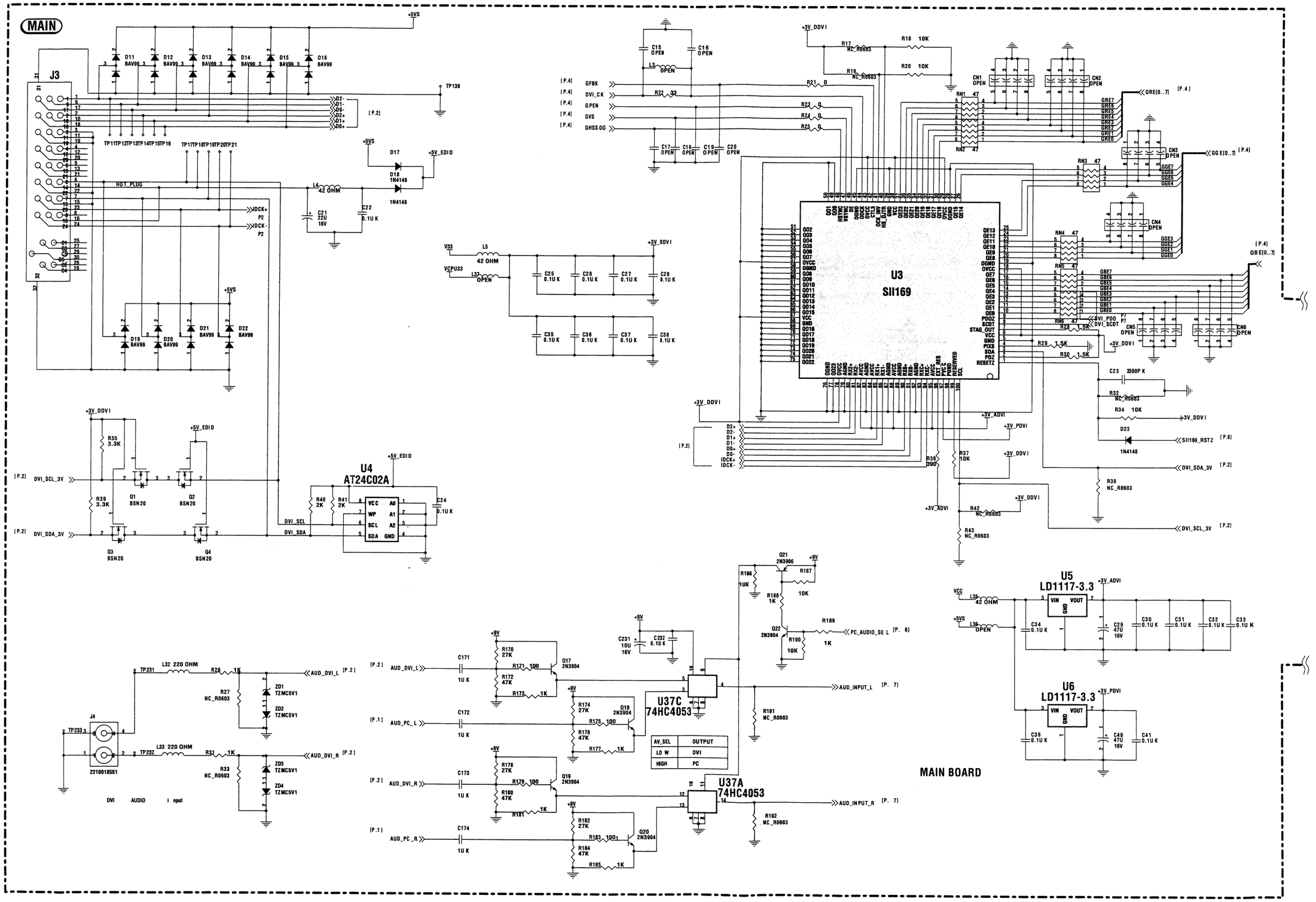
MAIN BOARD INTERFACE - INTERFACE MAIN BOARD - SCHALTBILD MAIN BOARD - SCHEMA DELLA MAIN BOARD INTERFAZ MAIN BOARD

(MAIN BOARD 2/11-27")



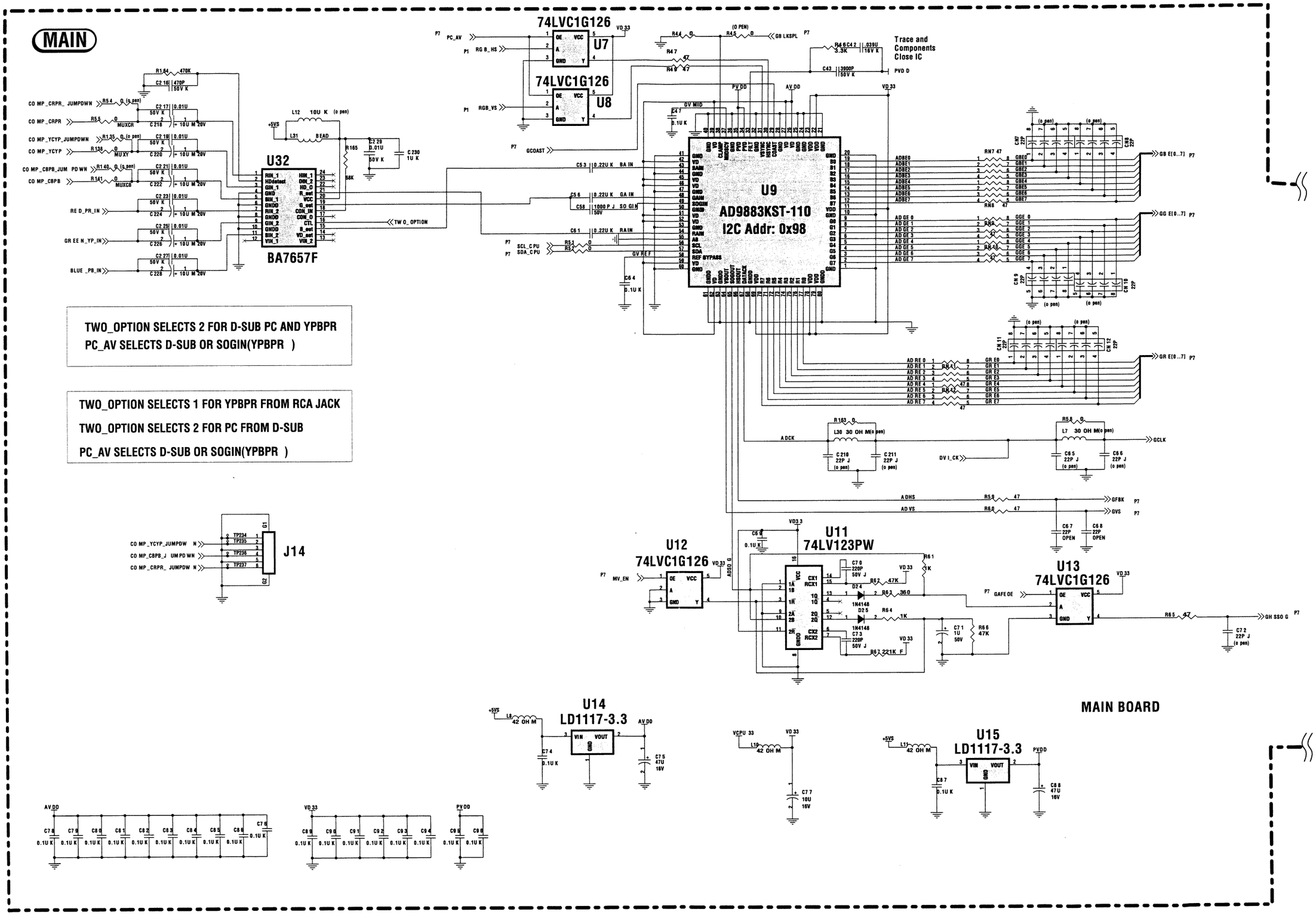
MAIN BOARD INTERFACE - INTERFACE MAIN BOARD - SCHALTBILD MAIN BOARD - SCHEMA DELLA MAIN BOARD INTERFAZ MAIN BOARD

(MAIN BOARD 3/11-30")



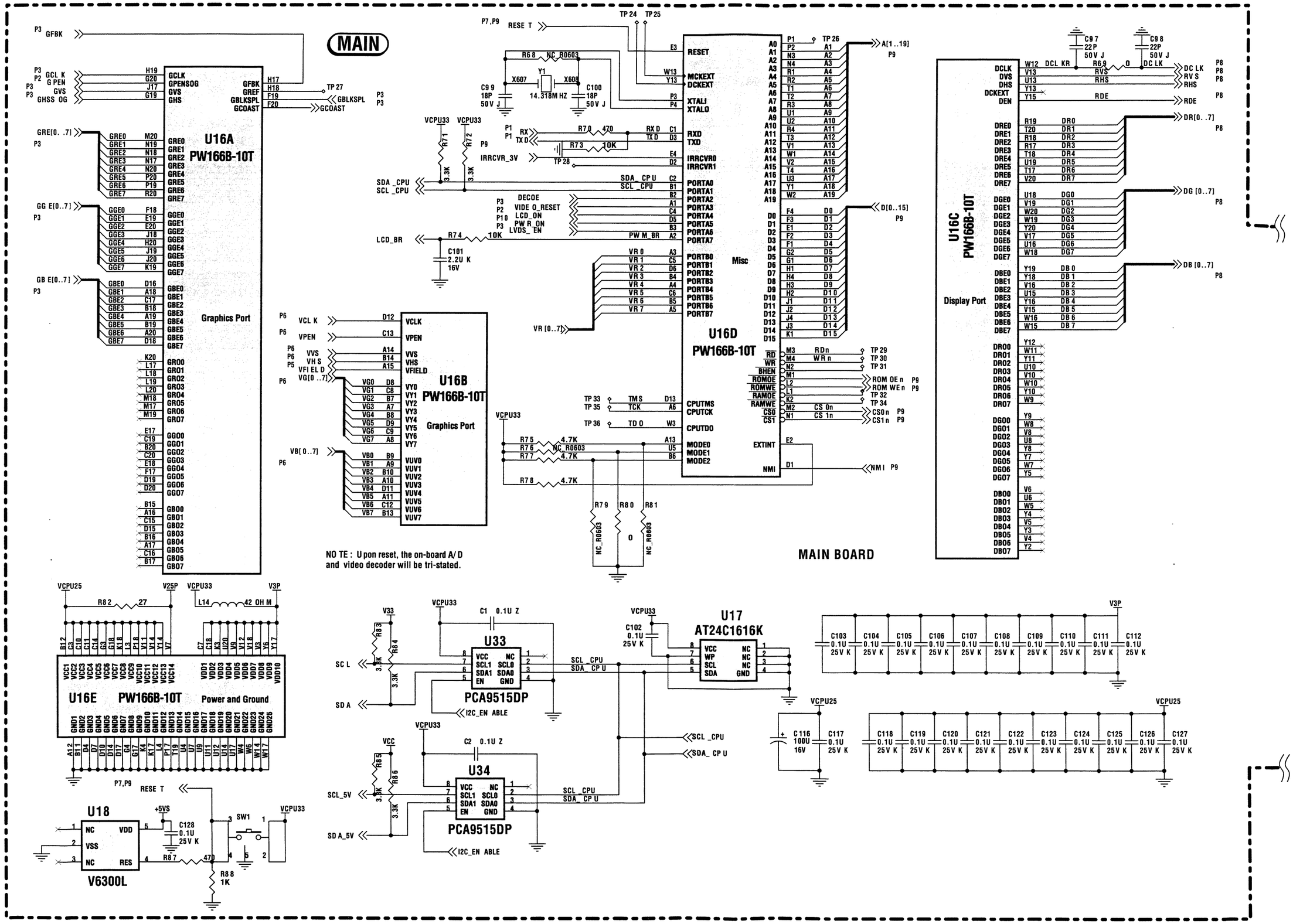
MAIN BOARD INTERFACE - INTERFACE MAIN BOARD - SCHALTBILD MAIN BOARD - SCHEMA DELLA MAINBOARD INTERFAZ MAIN BOARD

(MAIN BOARD 4/11-27",30")

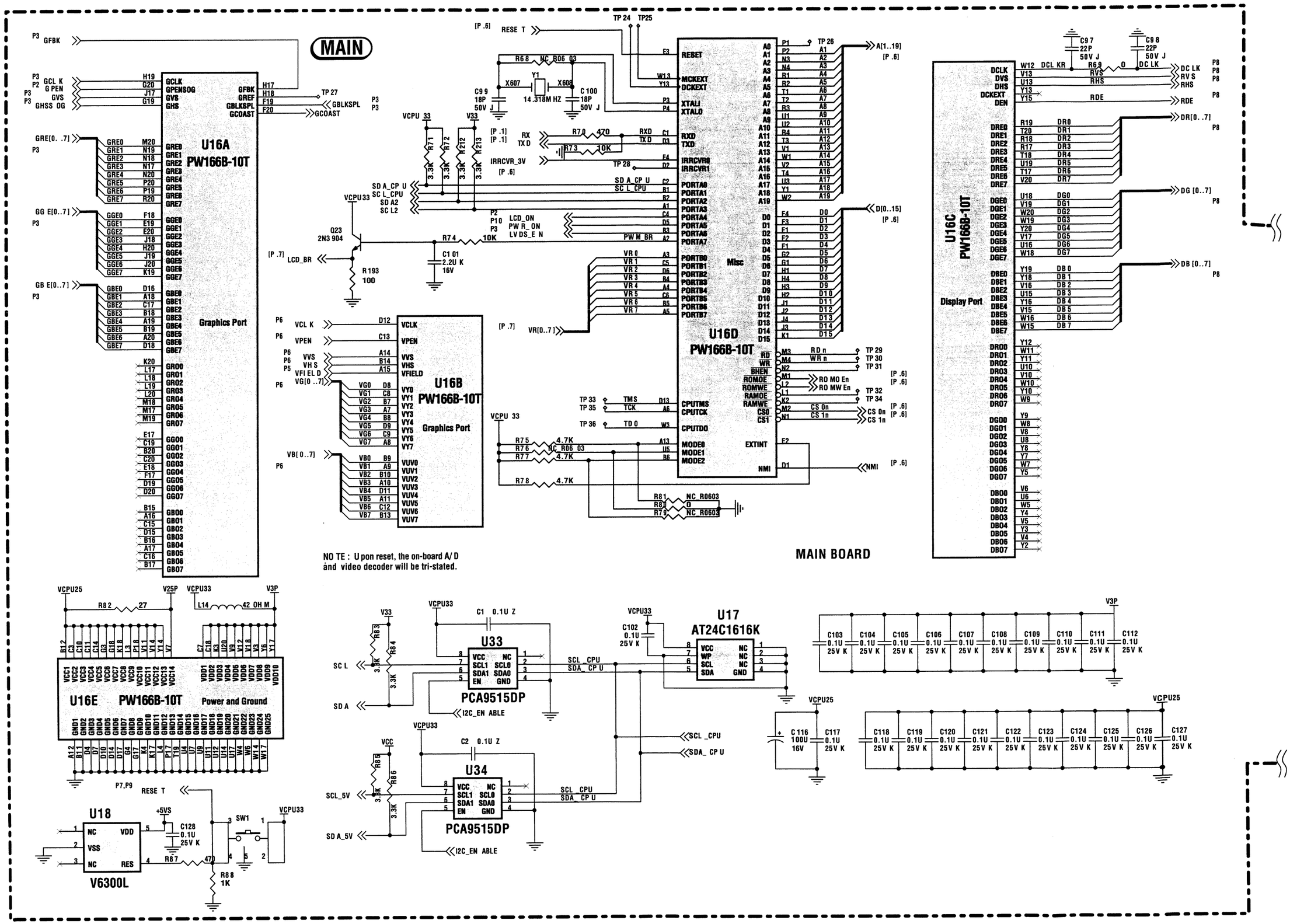


MAIN BOARD INTERFACE - INTERFACE MAIN BOARD - SCHALTBILD MAIN BOARD - SCHEMA DELLA MAIN BOARD INTERFAZ MAIN BOARD

(MAIN BOARD 5/11-27")



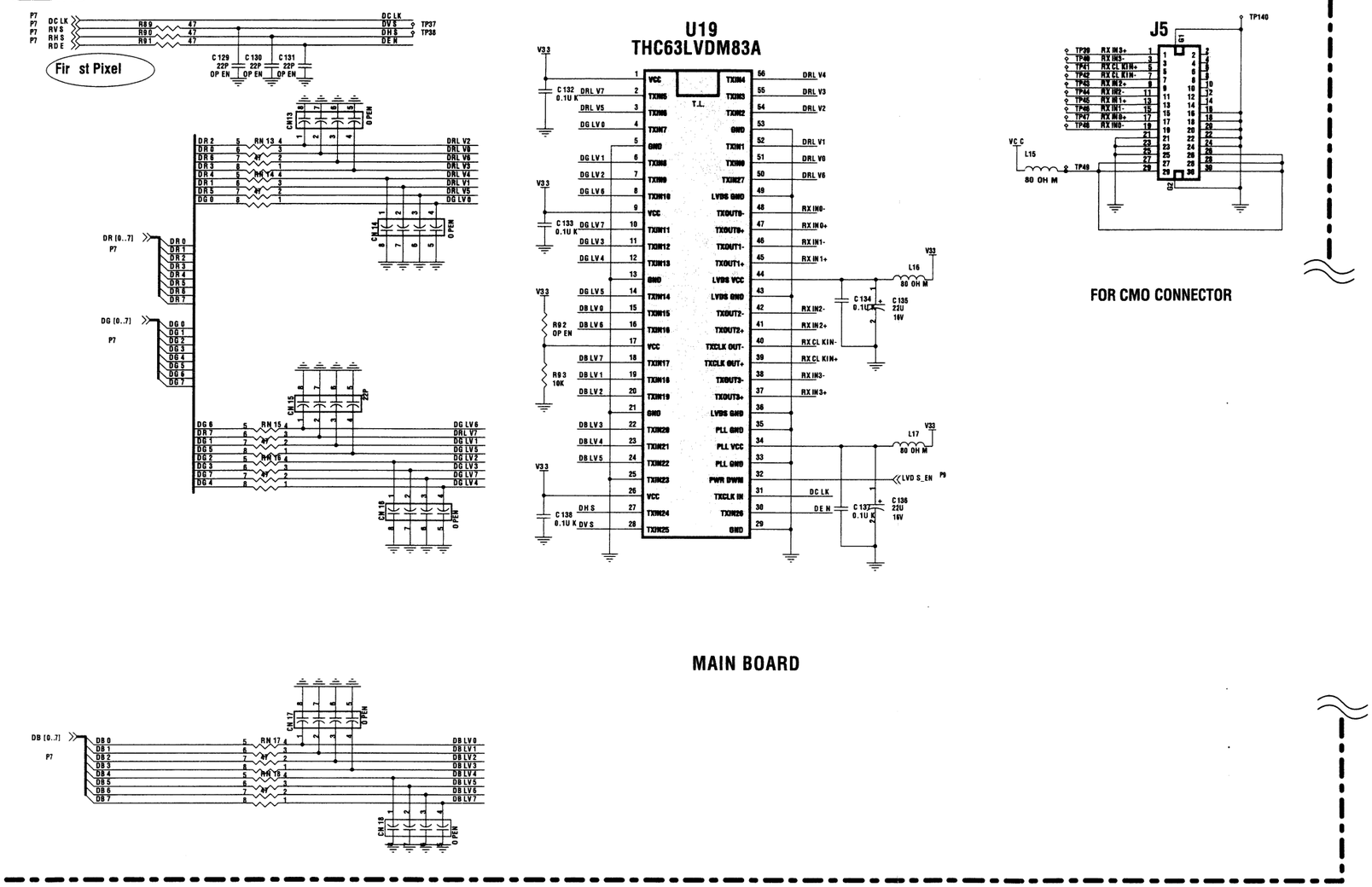
(MAIN BOARD 6/11-30")



MAIN BOARD INTERFACE - INTERFACE MAIN BOARD - SCHALTBILD MAIN BOARD - SCHEMA DELLA MAIN BOARD INTERFAZ MAIN BOARD

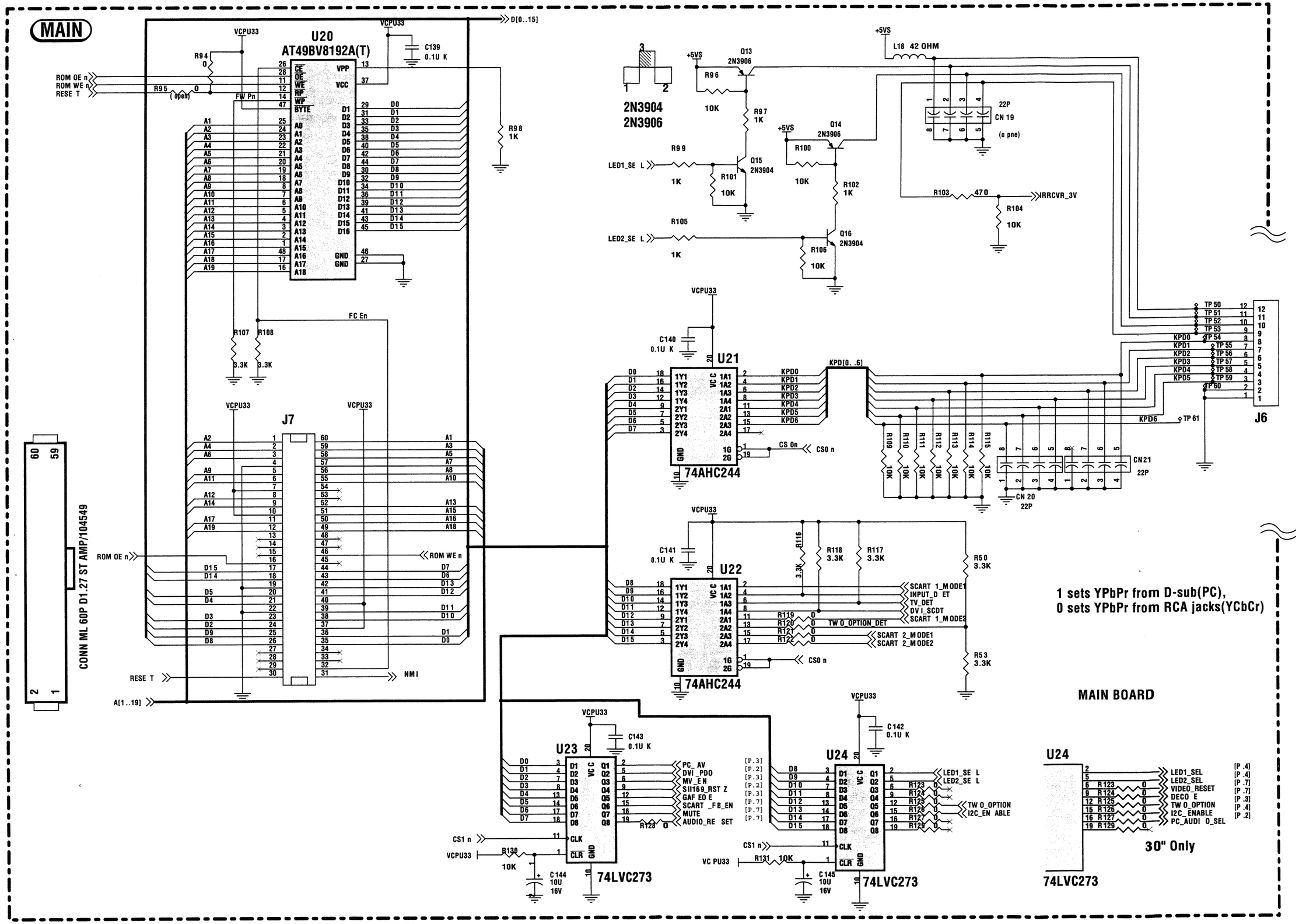
(MAIN BOARD 7/11-27",30")

MAIN



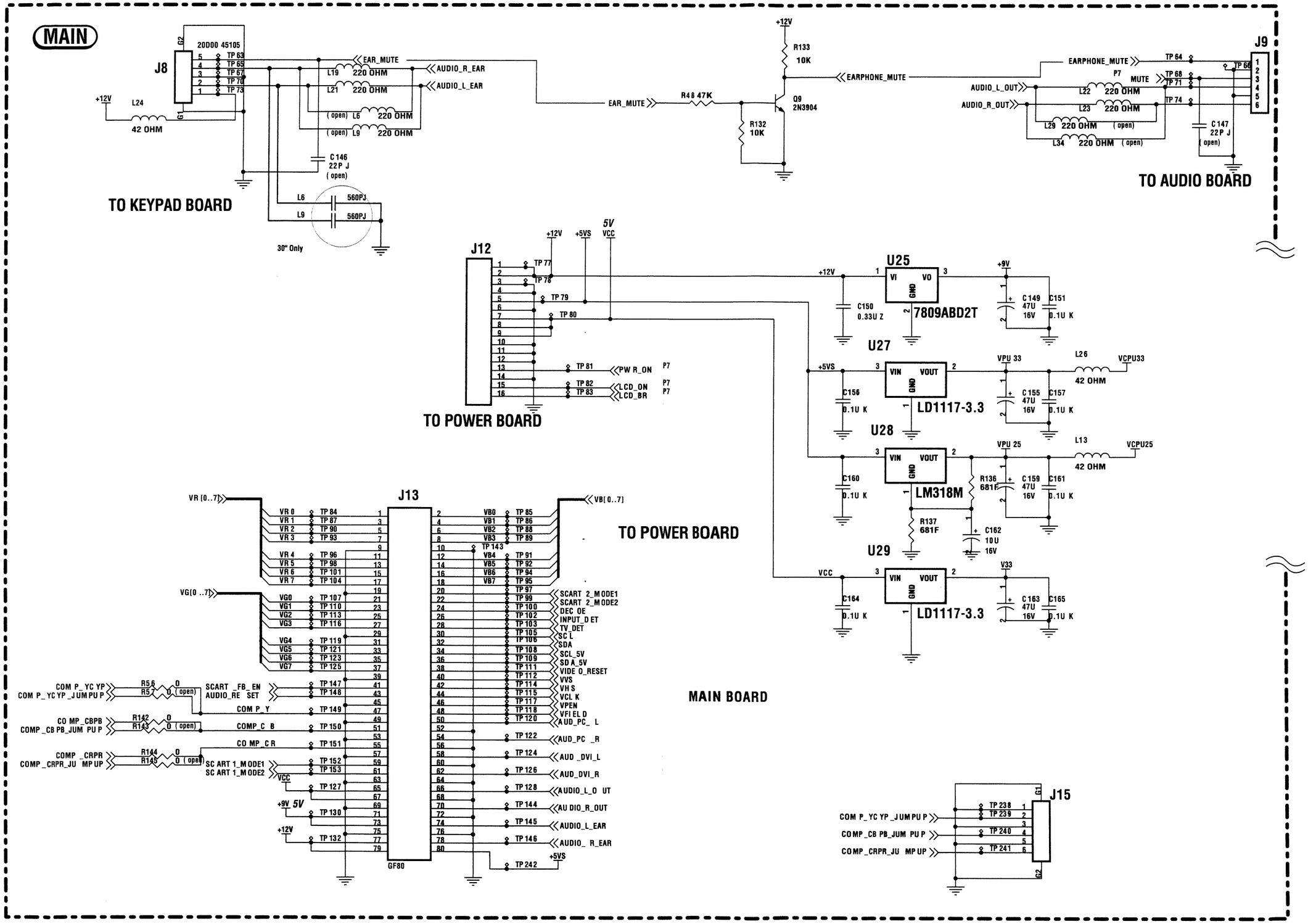
MAIN BOARD

(MAIN BOARD 8/11-27",30")

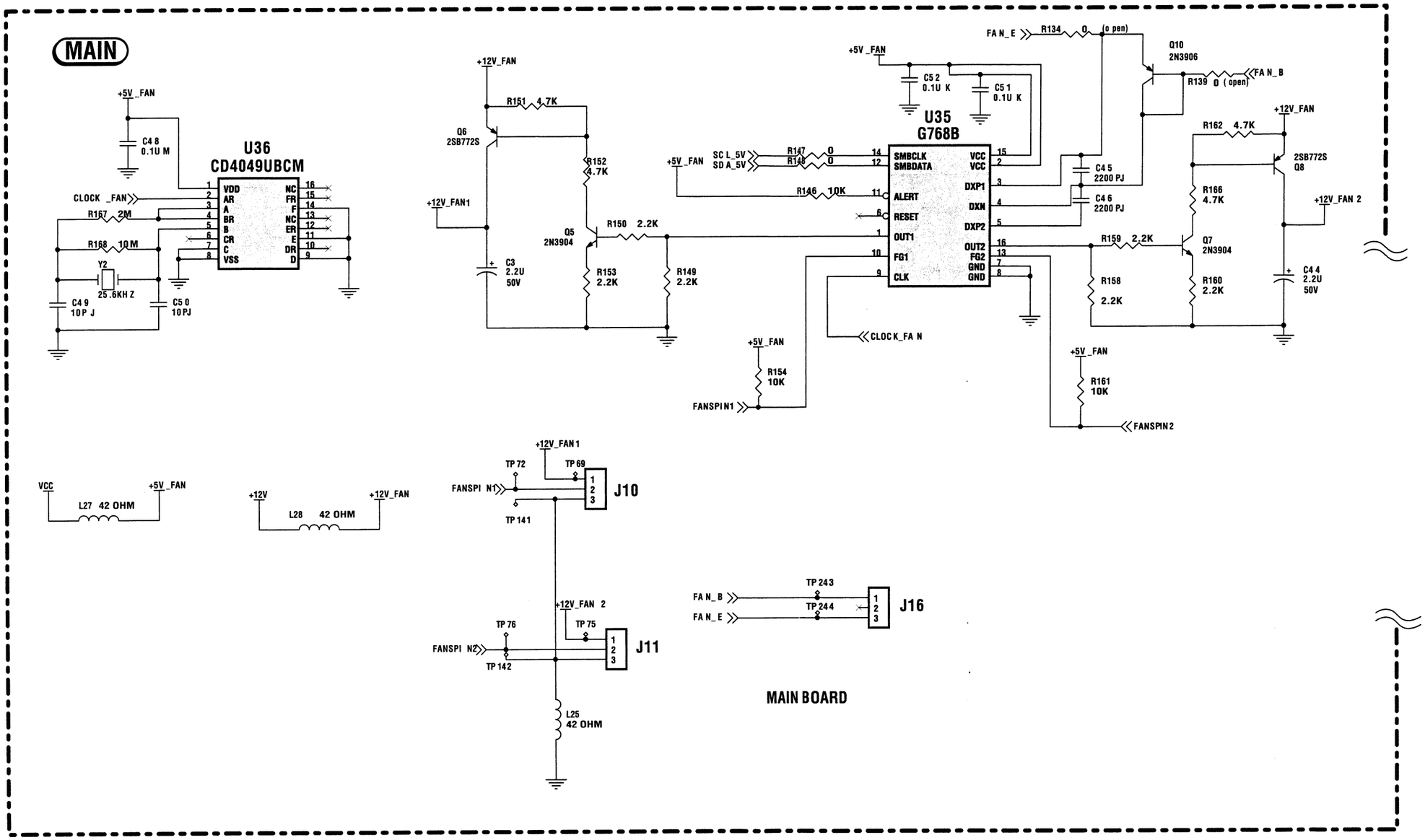


MAIN BOARD INTERFACE - INTERFACE MAIN BOARD - SCHALTBILD MAIN BOARD - SCHEMA DELLA MAIN BOARD INTERFAZ MAIN BOARD

(MAIN BOARD 9/11-27",30")

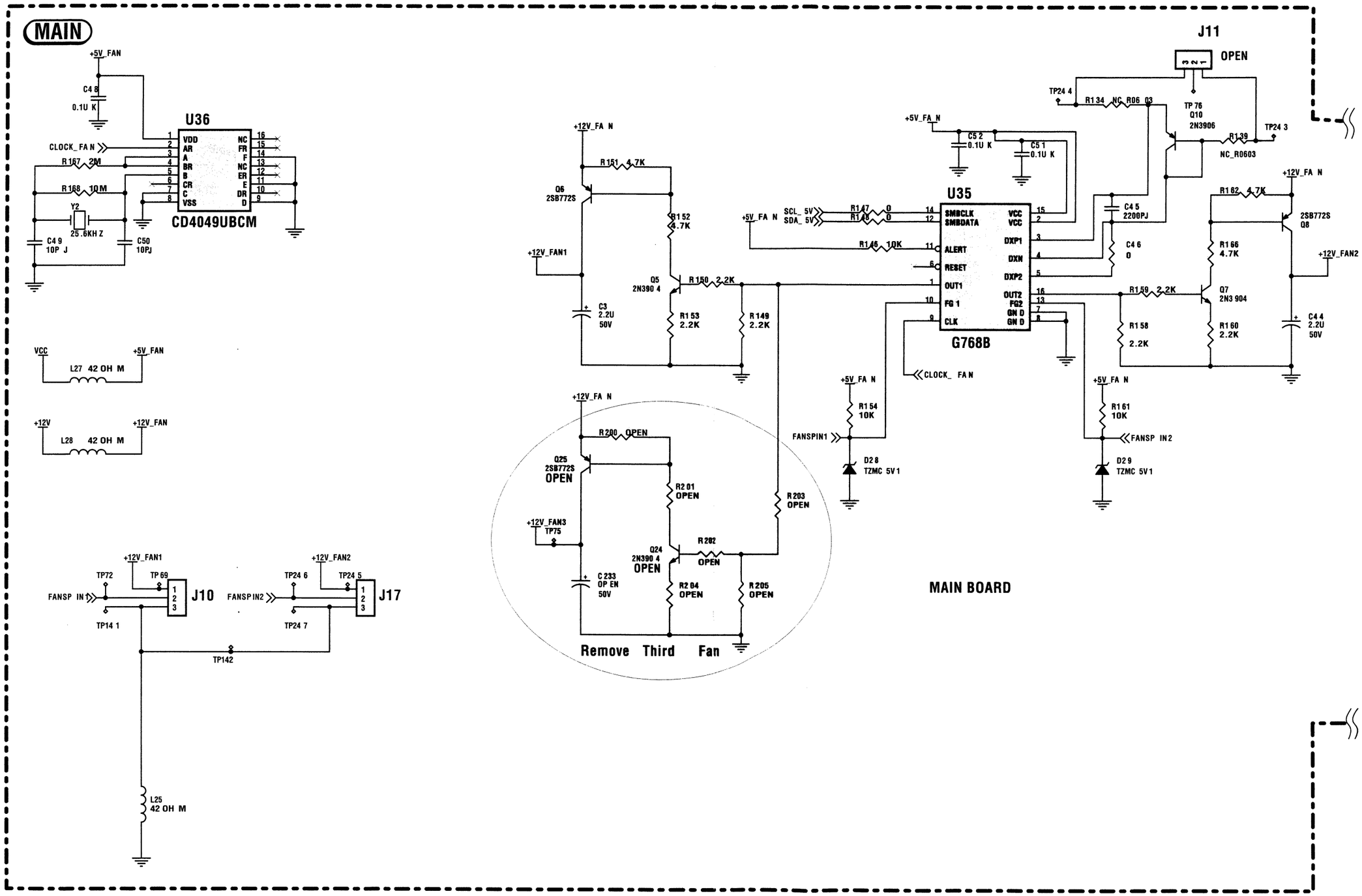


(MAIN BOARD 10/11-27")



MAIN BOARD INTERFACE - INTERFACE MAIN BOARD - SCHALTBILD MAIN BOARD - SCHEMA DELLA MAIN BOARD INTERFAZ MAIN BOARD

(MAIN BOARD 11/11-30")

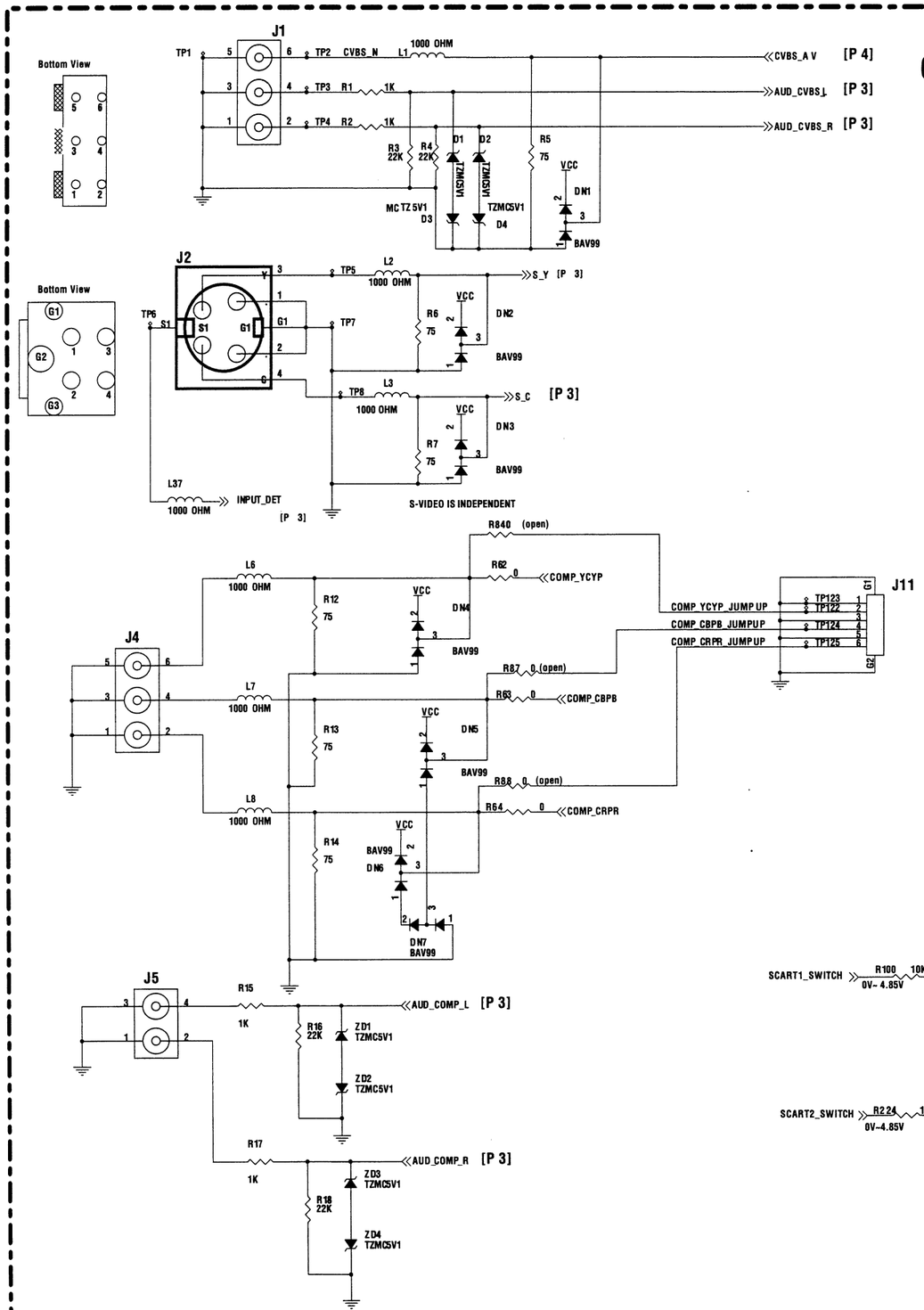


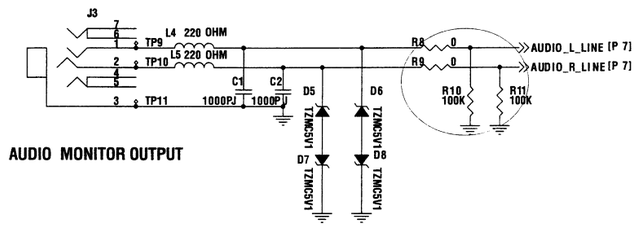
MAIN BOARD

(CONNECTOR BOARD 1/7-27",30")

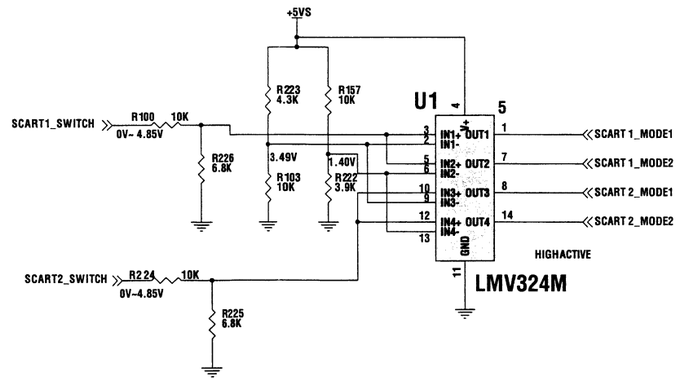
Connector board

AV





AUDIO MONITOR OUTPUT



	Mode1	Mode2	
8.6-12V	1	1	scart 4:3
3.5-8.6V	0	1	scart 16:9
0-3.5V	0	0	Prev. status

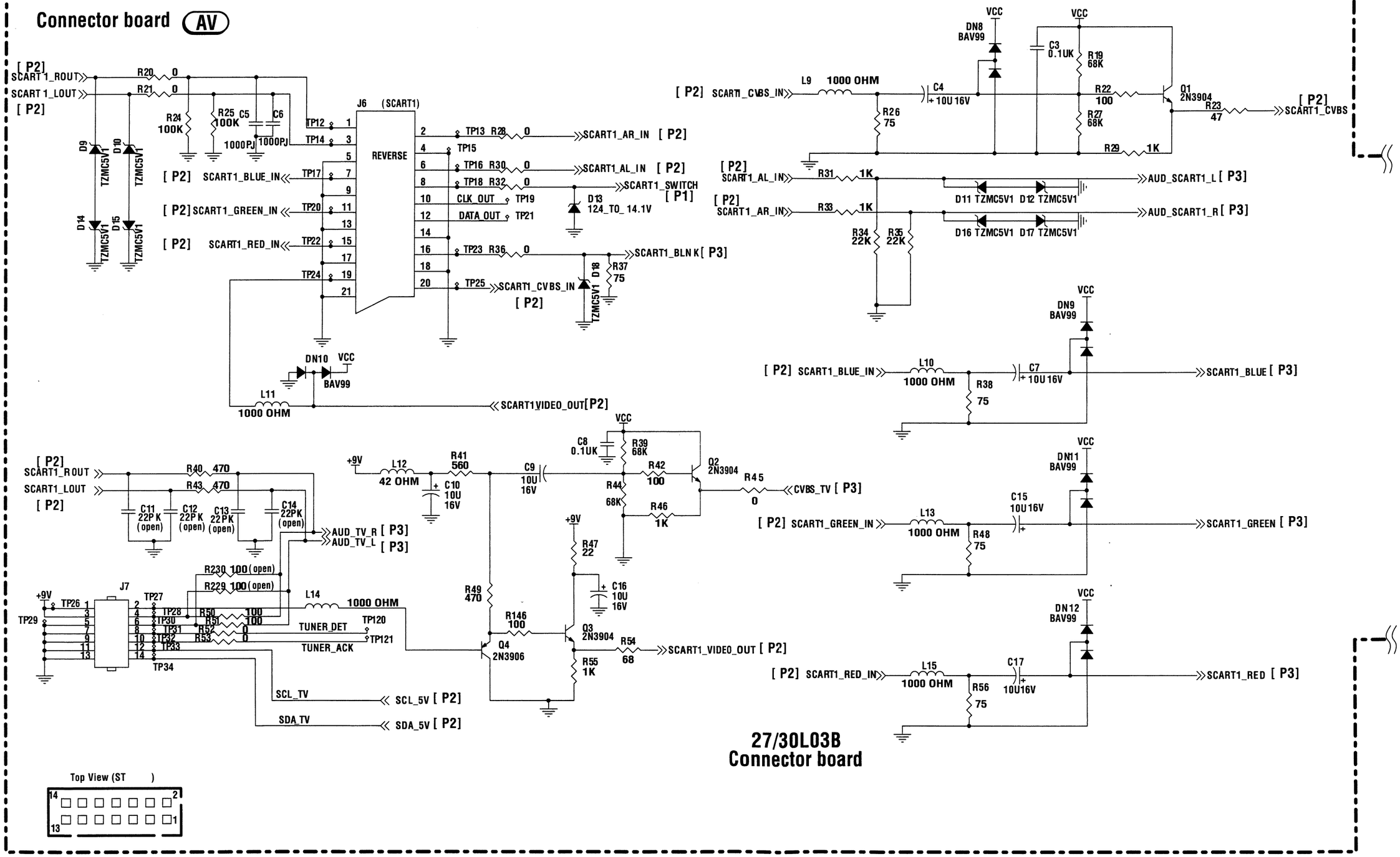
27/30L03B

CODE: 99.M2675.001

Connector board

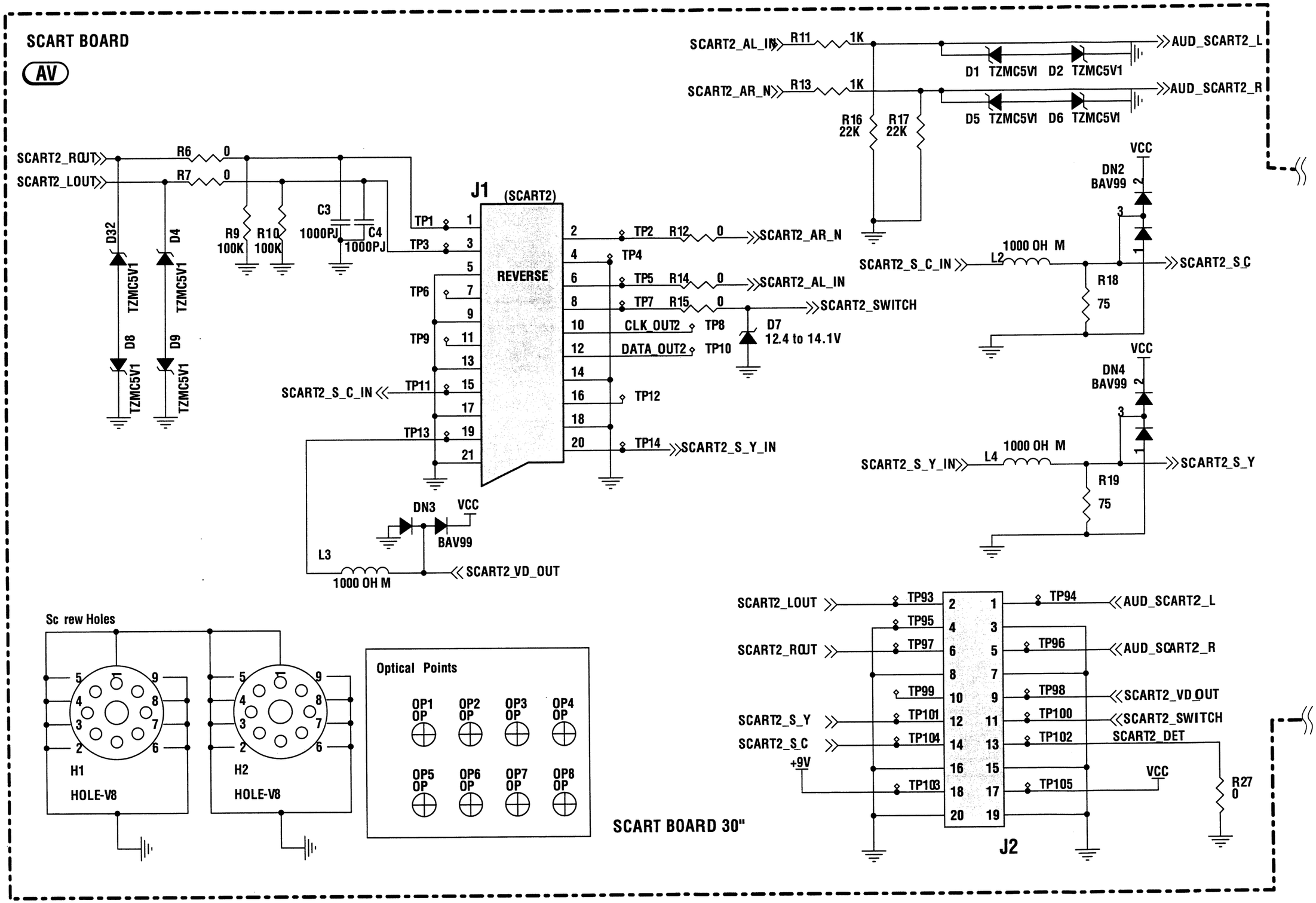
(CONNECTOR BOARD 2/7-27",30")

Connector board AV



27/30L03B
Connector board

(CONNECTOR BOARD 3/7-30")



(CONNECTOR BOARD 4/7-27",30")

AV

U3
VPC3230D
I 2C : 0X8E

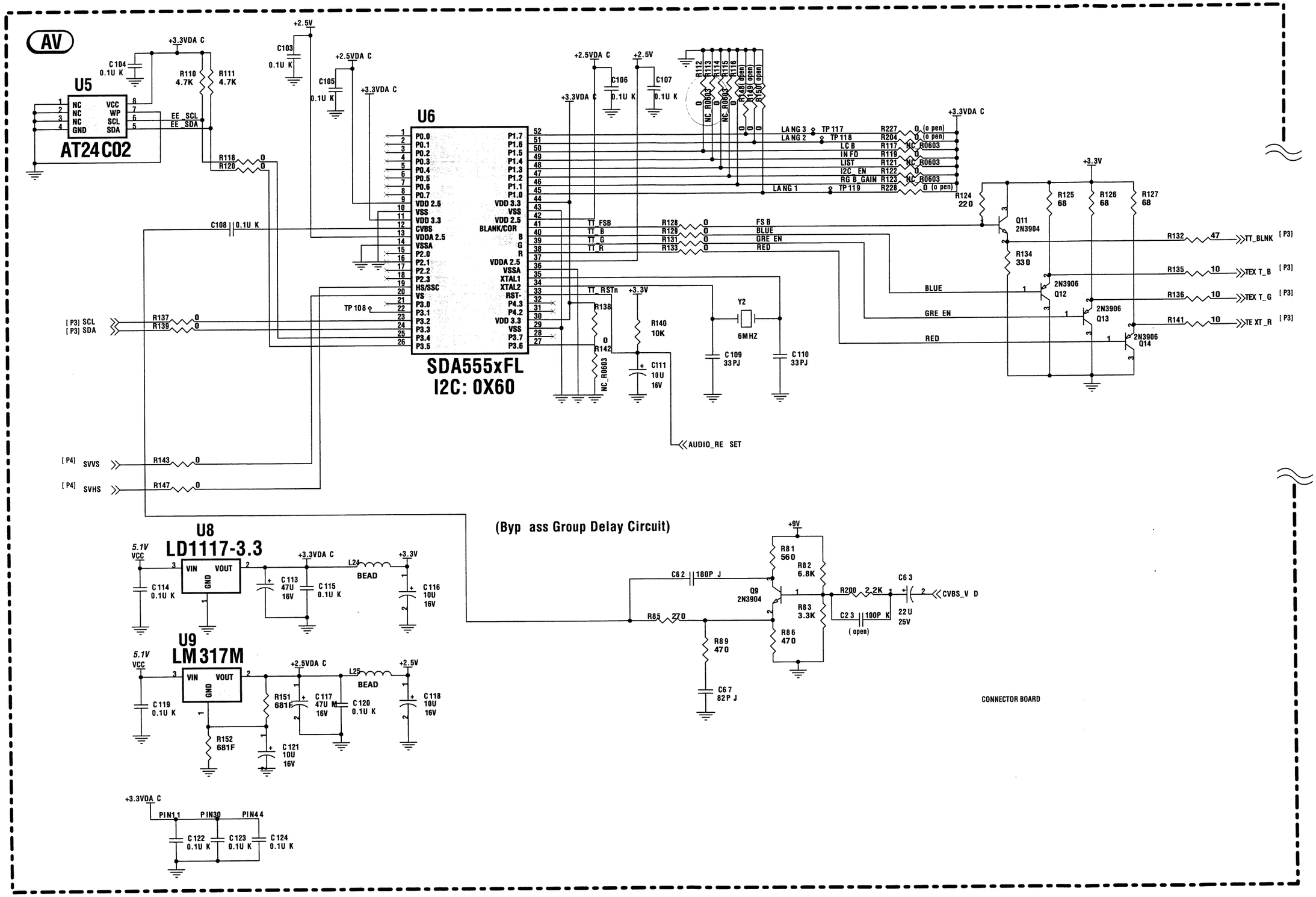
U1
TDA8601T

U4
LD1117-3.

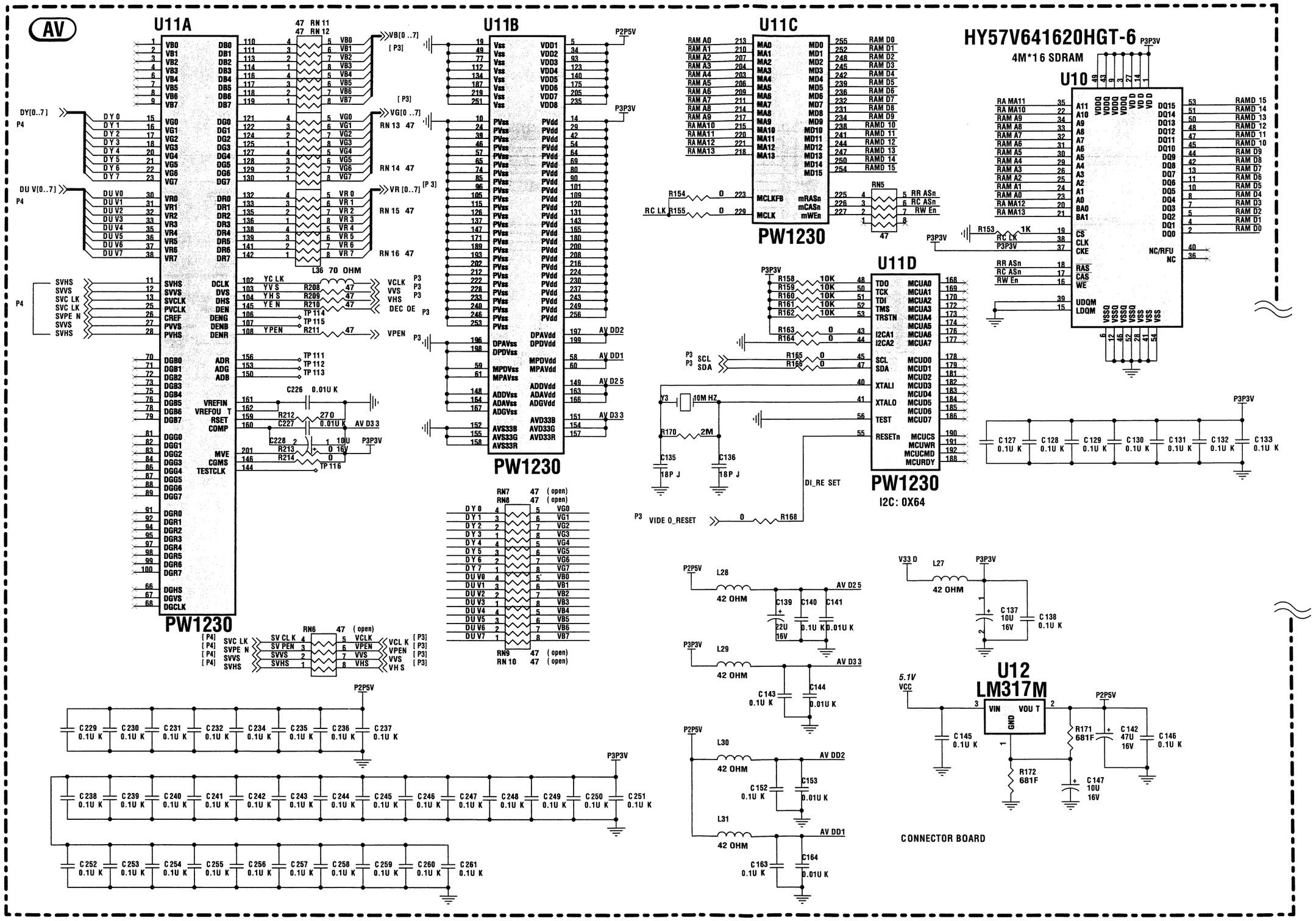
DECOE	Y/C Output
L	Disable
H	Enable

CONNECTOR BOARD

(CONNECTOR BOARD 5/7-27",30")

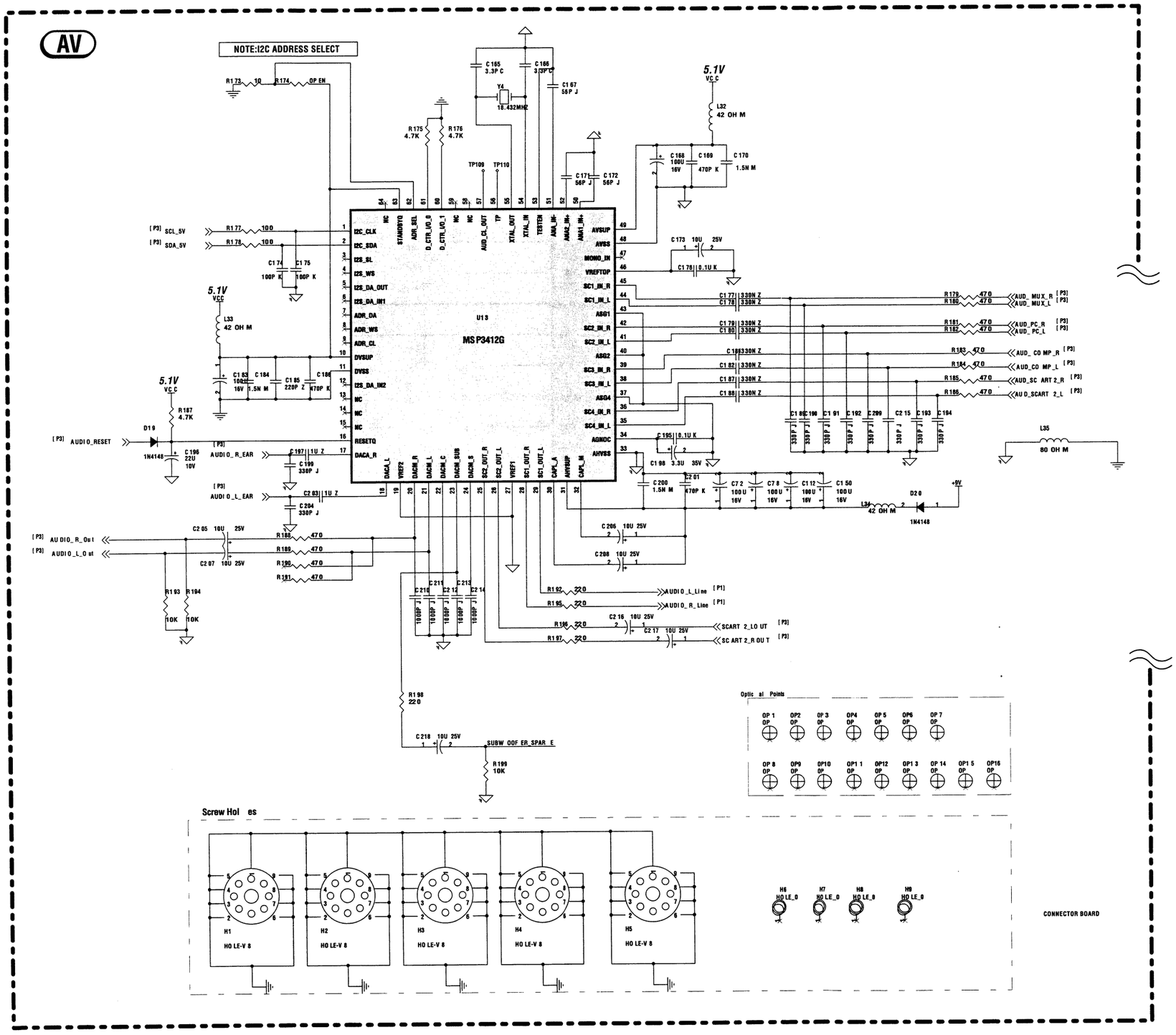


(CONNECTOR BOARD 6/7-27",30")



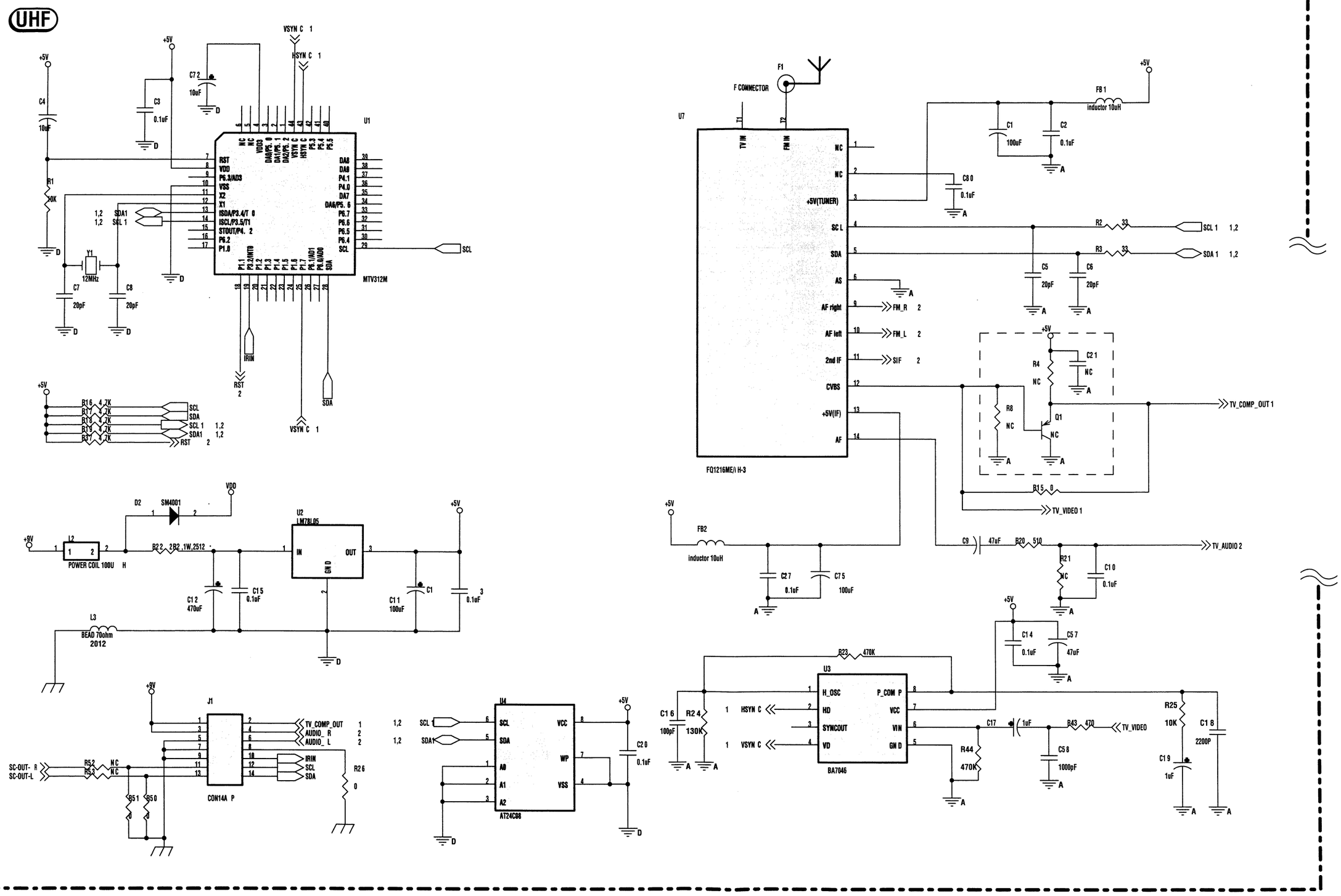
VIDEO SIGNAL PROCSSING - TRAITEMENT VIDEO - VIDEO SIGNALVERARBEITUNG - ELABORAZIONE VIDEO - TRATAMIENTO VIDEO

(CONNECTOR BOARD 7/7-27",30")



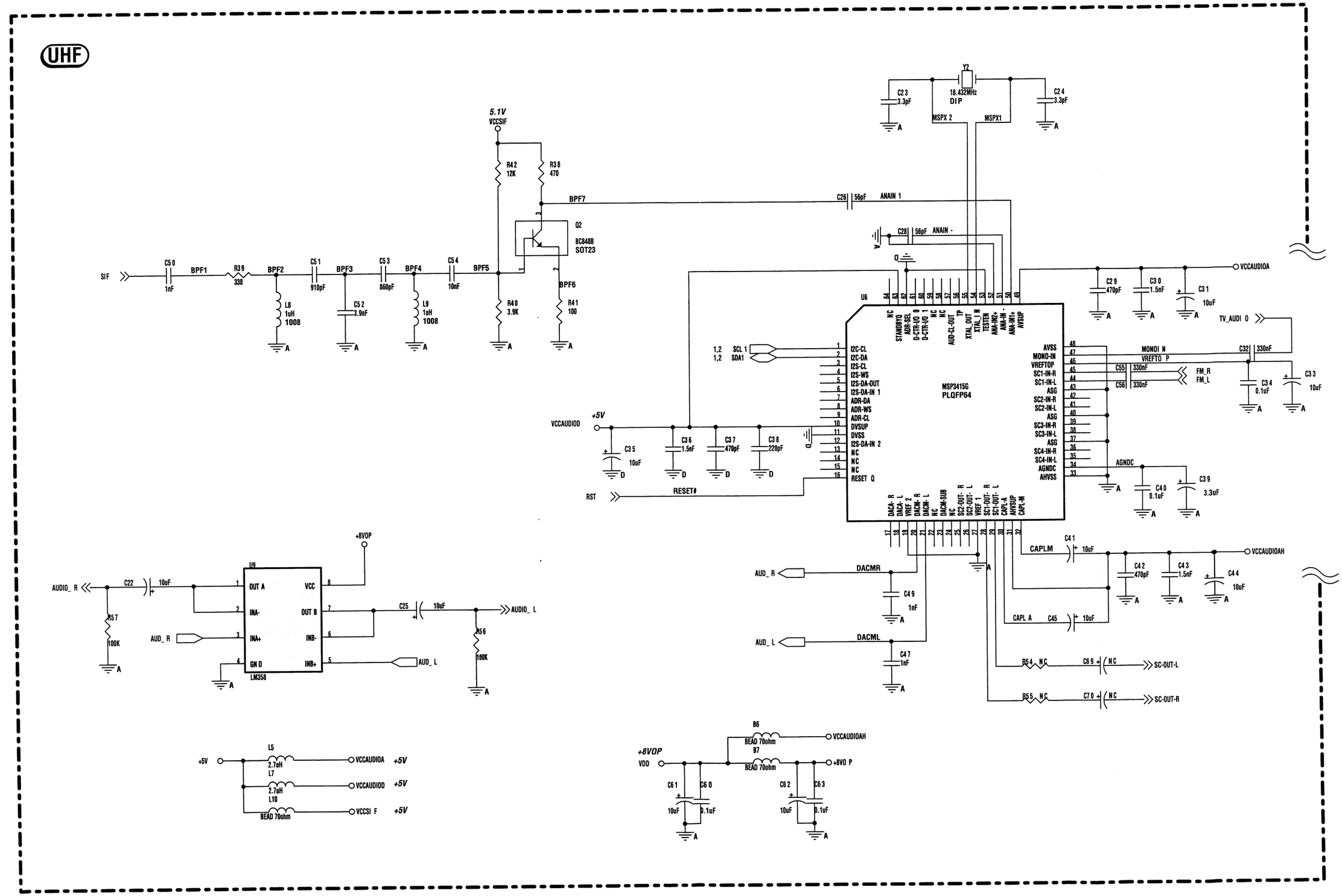
TUNER SCHEMATIC DIAGRAM - SCHEMA TUNER - SCHALTBILD TUNER - SCHEMA DELLA SINTONIZZATORE - ESQUEMA SINTONIZADOR

(TUNER / POWER IN 27" / 30")

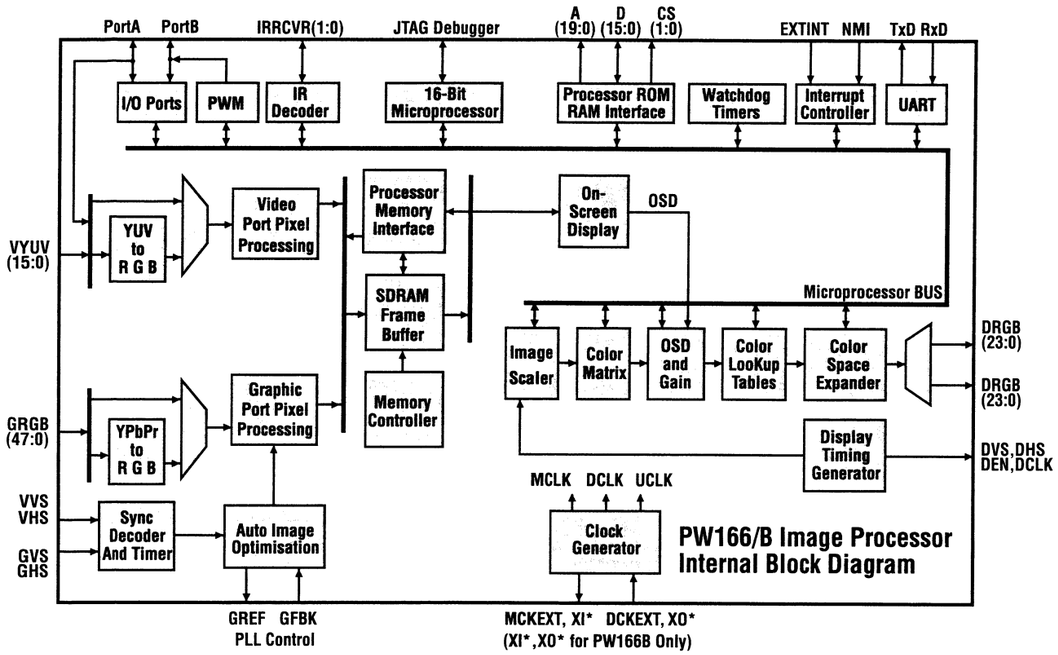


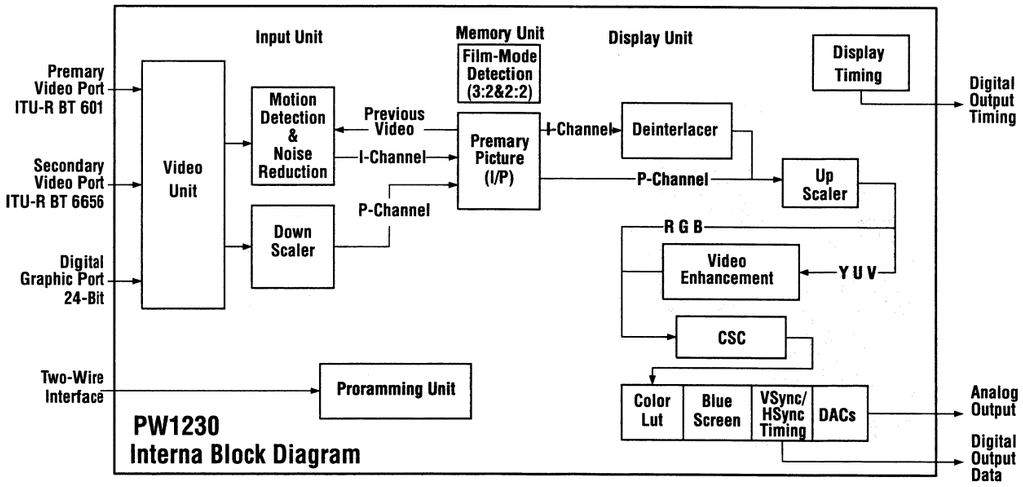
TUNER SCHEMATIC DIAGRAM - SCHEMA TUNER - SCHALTBILD TUNER - SCHEMA DELLA SINTONIZZATORE - ESQUEMA SINTONIZADOR

(TUNER / SOUND PROCESSOR 27", 30")



INTEGRATED CIRCUITS BLOCK DIAGRAM





INTEGRATED CIRCUITS BLOCK DIAGRAM